

TRUTH & ERROR



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Truth and Error

A STUDY IN CRITICAL LOGIC

BY

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INTRODUCTION.

Truth is the goal of the intellect as well as its perfection and ornament. In spite of this there are philosophers who maintain the inability of the intellect to attain truth and make bold to deny the very existence of truth. Their systems are known by various names, such as: skepticism, idealism, relativism, pragmatism. In refutation of these systems and in defense of the rights of reason, the schoolmen have developed a special science which they call "Critical Logic."

The purpose of this science is threefold: to examine and demonstrate the nature of truth, to vindicate the ability of the intellect to attain truth, and to establish the criterion for distinguishing truth from error.

The following treatise on "Truth and Error" is submitted as an exposition of the first of these three purposes.

Special stress has been laid on the positive doctrine, and many unnecessary controversies have been dispensed with in the hope of assisting the earnest student to a clear understanding of the foundations of knowledge.

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TRUTH AND ERROR

CHAPTER FIRST

INTRODUCTORY NOTIONS

Summary: Purport of treatise — Definition of truth — Division of truth into ontological, logical and moral — Moral truth and propositional truth compared — Truth used metaphorically — Truth contrasted with its opposite, falsity — Truth an analogical concept — Truth of knowledge, truth properly so called — Thesis — Proof — Some subsidiary terms explained — Apprehension — Idea — Notion and Concept — Subjective and objective concept — Corollary — Material object and formal object of an idea — Difference between idea and phantasm — An objection answered — Judgment defined — Essence of judgment determined — Division of judgments into immediate and mediate, analytical and synthetical — Proposition — Return to main topic.

1. Purport of Treatise. The treatise we are about to present is inscribed "Truth and Error." The truth here discussed is logical truth or truth of knowledge. For truth in contradistinction to error always designates the truth of knowledge.

2. Definition of Truth. Truth in general is described as "conformity between thought and thing." The accuracy of this definition is best shown by what is known as the "analytical process." In this process (fully set forth in *Dialectics*) we first consider the objects to which the notion whose definition is sought can be applied; then, disregarding what is peculiar to each of these objects we disentangle the element common to all. This common element constitutes the definition desired. Thus if I wish to find the definition, say of "man," by this method, I place before my mind the different races of men, Caucasians, Indians, Negroes, Malays, and Mongolians, and then suppressing in whatever they differ, retain only what belongs to all, viz.: animality and rationality. In this manner I come to know that "man" is a rational animal, and this is the definition of "man." We shall now employ the same method of procedure in the case of truth.

Truth, according to its ordinary acceptation, is a term of the broadest application. It is applied to things as well as to the mental and oral expression of these things. Here are a few instances typical of this diversity of usage. "William is a true friend of mine"; "My idea of God is true"; "The words this witness has just spoken, are true."

In all these examples, the adjective "true" is

used to indicate that there exists some sort of conformity between thought and thing. "Conformity between thought and thing" is then the general definition of truth.

To make this definition clearer, we shall submit the sentences just given to an analysis. What do I mean when I call William a true friend of mine? I mean that his sentiments and conduct towards me correspond to my conception or idea of "friend" and "friendship." And when I ascribe truth to my ideas and judgments, what do I intend to express? Nothing else except that they are conformable to reality. And lastly, why do I say that a witness speaks the truth or that his words are true? I do so because his utterances accord with his (subjective) judgments regarding the matter about which he gives me information.

Thus it becomes manifest that truth always implies some sort of correspondence between thought and thing. This is sufficiently evident as regards the first two instances given. For in the first instance the conformity of William to my idea of friend and in the second instance, the conformity of one of my ideas to God plainly denote correspondence between thought and thing.

It is needless to point out that when we oppose thought to thing we use "thing" in a restricted sense, namely as contradistinguished

from the mere expression or representation of something; for taking thing in its broadest signification, it includes thought.

But how does the third sort of conformity — namely the conformity between the spoken word and the (subjective) judgment in a person's mind — tally with our general definition of truth? What corresponds to "thing" here? Perhaps the "spoken word"? But how can the "spoken word" be regarded as a "thing" any more than "thought" since it is likewise merely the expression or a sign of something else? To this we reply that words can be looked upon as things in so far as they stand for things, and so they must be taken in our present discussion, since there can be no resemblance between the material word and the idea but only between the object signified by the word and the idea. Hence conformity of speech (or words) with thought must be understood to be conformity of speech *as* expressive of things with thought. Consequently, it is correct to say that truth in general is "conformity between thought and thing."

3. Division of Truth into Ontological, Logical, and Moral. We now pass to the classification of truth. Truth is threefold, namely, ontological, logical, and moral. The meaning and correctness of this division will become

readily apparent if we examine a little more closely into the examples given above.

When I say, "This man is a 'true' or 'genuine' friend," I mean that he combines in himself all that goes to make up my idea of "friend"; in other words, that his sentiments and conduct are in conformity with this idea. It is plain that in this instance "true" indicates the correspondence of a reality or thing (a person in the case cited) with an idea; and this is what is called "ontological" truth or truth of "being"; it is defined as "correspondence of thing with thought." Now this correspondence may be twofold according as a thing is compared with an idea as a *pattern* which it imitates or as a *standard* by which it is judged or estimated. Thus a vein of yellow metal in a rock is said to be "true" gold in respect to the Divine idea because it has been *patterned* after a conception in God's mind. The mine-owner, on the other hand, pronounces the glittering streak of precious metal "true" gold because he knows what gold is and because he finds that the newly discovered vein imbedded in the wall of his mine exactly answers to his conception of gold. He uses his conception as a *standard* by which to gage the object under consideration.

The other example which we gave to illustrate the general notion of truth was, "My ideas re-

garding a certain matter are true." A little reflection will show us that here we have to do with a species of truth different from ontological. For I call my ideas true because they are conformable to things, and not because things are conformable to them. This kind of conformity is named logical truth or truth of knowledge and may be defined as "conformity of thought with thing or of knowledge with the object known."

We would remark here that though the definitions of ontological and logical truth seem to be alike — the terms of comparison "thing" and "thought" being the same in both — they are by no means identical. For in defining ontological truth, "thing" is the subject of the relation between thing and thought, and "thought" the term, while in defining logical truth the reverse is the case. Again, thing and thought fulfil altogether different functions in each of the two cases. For in logical truth, the thing known produces or gages my perception of it whereas in ontological truth, the thing is produced, gaged, or estimated according to the idea to which it is compared. Thus when I say, "The judgment, David was a hero, is logically true," I regard the Jewish king's heroism, namely his physical prowess and nobility of soul, as determining or giving rise to this judgment. But when I affirm, "King David is a *true*

hero," I gage or estimate the genuineness of his heroism according to my idea of a hero.

We may confirm the foregoing statement as to the difference between ontological and logical truth by a short quotation from St. Thomas.¹ He says: "Similitudo rei cognitae dupliciter est in cognoscente, uno modo sicut causata a re . . . alio modo sicut causa rei, ut patet in artifice, qui cognoscit artificiatum per illam formam, per quam ipsum fecit." This passage may be rendered thus: "The likeness of the object known is in the mind in a twofold manner; namely either as caused by the object . . . or else as the cause of the object: the latter we see in the case of the artist who knows the work of art he is producing by the conception which guides him in making it."

The above discussion shows that the relations between thought and thing in the definitions of ontological and logical truth are as different as are those of father to son and son to father.

We now come to the consideration of the third example given before, namely, "The words of this witness are true," "He speaks the truth." When I say this I do not want to denote either correspondence of thing with thought, nor of thought with thing, but what I want to signify is, that the speech or the words of the witness express his mind or are conformed to what

¹ Quodl. 7, a. 3.

he judges in regard to the matter to which he bears testimony. Such conformity between speech and subjective judgment is called *moral* truth. One whose utterances are habitually in accord with his beliefs, whether right or wrong, is called truthful. It is for this reason that this kind of truth is characterized as "moral." For the employment of language expressing the hidden thoughts of the mind depends upon the proper exercise of our free will, and hence constitutes a praiseworthy or *moral* action.

4. Moral Truth and Propositional Truth Compared. Moral truth must not, however, be confounded with the truth of a proposition. For a proposition is said to be true when it expresses a judgment conformable to reality, whereas moral truth or truth of speech consists in this that my words — which, of course, will likewise take the form of a proposition — set forth a judgment I have formed of something, regardless of the fact whether this judgment is in itself true or false.

5. Truth Used Metaphorically. The word "true" is also frequently employed *metaphorically* without any distinct reference to thought, as when an officer is said to be true to his charge, or a patriot true to his country, or a copy a true likeness of the original. But a little reflection will show that even here the word "true" is used on account of some sort of conformity or

correspondence of one thing to another as to its rule, standard, or pattern. Hence "true" in all the aforementioned significations bears at least some analogy to the same word taken strictly.

6. Truth Contrasted with Its Opposite Falsity. A little additional light might be thrown on the definition of truth by offsetting it with the definition of its opposite, falsity. Since truth is conformity between thought and thing, its contrary or opposite is, of course, want of conformity or rather discrepancy between thought and thing. Like truth, it is either ontological, logical, or moral, according as thing is at variance with thought, or thought with thing, or speech with the speaker's private judgment.

Here it should be further noted that logical and moral falsity have received special names, the former being called error and the latter, a lie or falsehood.

From these remarks we infer that logical truth may be accompanied by moral falsity, as when one knows that he is chargeable with theft, but denies his guilt. Again, there may be moral truth and logical falsity in regard to the same thing; and this always happens when one is mistaken about something and asserts his mistaken views in good faith. It is also possible that logical and moral falsity should go together; such would be the case if a person at the same time erred in respect to some fact and asserted

the contrary of what he thought. Suppose a young man who has been kidnaped in his childhood were to give himself out as the son of his real parents thinking, however, that he was practicing deceit, he would at the same time be mistaken and tell a lie.

7. Truth an Analogical Concept. The preceding considerations show that the concept "truth" is applied to thing, thought, and speech in a meaning partly the same and partly different. For the three classes of truth all imply conformity between thought and thing; but the kind of conformity is different in each as an examination of their definitions will readily reveal. Hence the concept of truth is what is called an "analogous" concept, that is, a concept which is affirmed of the classes contained under it in a signification partly the same and partly different.

8. Truth of Knowledge Truth Properly So-called. We are now done with the division of truth into its three kinds, viz., ontological, logical, and moral, or, truth of being, truth of knowledge, and truth of speech. The question now arises, to which of these three kinds of truth is the term "truth" most properly applied.

For the sake of greater clearness and emphasis we shall state the answers to all leading questions in the form of theses or propositions.

THESIS I

The name "TRUTH" belongs primarily to truth of knowledge.

9. **Proof.** What we wish to say when we make this statement is, that, according to common usage, truth is ascribed first and foremost to mental acts, and to things and speech only in a secondary sense by reason of their resemblance to truth of thought. In other words, all we maintain is, that the principal and ordinary signification of "truth" is logical truth, just as the principal meaning of the word "sharp" is, "having a thin edge or fine point," although it is also taken in a number of other senses more or less connected with the principal one. Now dictionaries are generally the best authorities to determine the common usage of words. Let us then turn to one of the best of them, the Century Dictionary. This dictionary — and with it all the others of any completeness are in substantial agreement — arranges the meanings of truth in this order:

(a) Conformity of thought with fact, conformity of a judgment, statement, or belief with reality.

(b) The state of being made true or exact; exact conformity to model, rule, or plan; accuracy of adjustment.

(c) (In the fine arts.) The proper or correct representation of an object in nature. . . .

(d) Veracity, truthfulness . . .

Now the *first* of these definitions describes logical, and the second, ontological truth; the third refers to one of the metaphorical acceptations of truth, and the fourth relates to moral truth.

We shall now confirm the verdict of the dictionaries by the authority of St. Thomas, who, let it be noticed in passing, has been particularly lauded for his concise and exact definitions of terms.

We will make Sir William Hamilton our spokesman and thus at the same time corroborate by the eminent Scotch philosopher's sanction what we assert to be the prevailing signification of the term under consideration. He says:¹ "All admit that by truth is understood an agreement, or correspondence between our thought and that which we think about. This definition we owe to the schoolmen. 'Veritas intellectus,' says Aquinas, 'est adaequatio intellectus et rei, secundum quod intellectus dicit esse quod est, et non esse quod non est.'"

It will be well to subjoin another quotation from St. Thomas more directly to the point. He writes:² "Veritas proprie est in solo intel-

¹ Logic 27.

² Sum. Theo., p. I, q. 16, a. 8.

lectu; res autem dicuntur verae a veritate quae est in aliquo intellectu," that is to say, "Truth is properly in the intellect alone; things are called true by reason of the truth which is in some intellect."

Logical truth or truth of knowledge then is truth properly so called; things and speech are styled true only in a secondary or analogous sense, as bearing a certain resemblance to truth of knowledge. At present our concern is with truth of knowledge. The truth of words and propositions, technically known as "the truth of the sign"¹ (sc. of logical truth), is likewise considered here. It is plain that truth is ascribed to words and propositions by way of metonymy. For this figure of speech names the sign after the thing signified.

10. Some Subsidiary Terms Explained.

But before we go any further, a short digression will be of service in order to explain a few terms of frequent occurrence in these pages, to wit, the terms apprehension, idea, concept, notion, and judgment.

11. Apprehension. Apprehension in philosophical language has a variety of meanings. It is applied not only to acts of the intellect, but also to those of the sensitive faculties, especially of the imagination. Thus the Century Dictionary tells us that apprehension has been

¹ Cf. Vocabulary of Philosophy by W. Fleming, under "Truth."

used to express intellection in general, cognition, understanding, conception, attention, memory, imagination, formerly emotion or sensibility." In this treatise apprehension is taken in a restricted sense for the first or most fundamental operation of the intellect and may be defined as the act by which the mind *merely* perceives or "seizes" an object. Now the mind perceives an object by representing it to itself, by, so to speak, depicting it in mental colors on itself. For this reason apprehension has also been described as an operation by which the intellect *represents* an object to itself. Note that in the definition given first we stated that through the apprehension the understanding *merely* perceives an object. The qualifying adverb "merely" was employed to indicate that the first operation of the mind neither affirms nor denies anything. On this account apprehension in its present technical signification is often designated as "simple" to distinguish it from the more "complex" act of cognition, the judgment. Hence simple apprehension has been aptly called "conception without judgment."

12. Idea. Idea, the second term to be explained, is defined as the representation of an object by the mind. If we compare this definition with that of apprehension, we will find apprehension and idea to be the same thing, only

conceived in a somewhat different way. For the definition of apprehension (viz., an *act* of the mind representing an object), gives prominence to the fact that a certain thought-formation is an *act*, and reduces to a secondary position, the circumstance that this thought-formation results in a representation, whereas the definition of idea (viz., the *representation* of an object by an act of the mind), reverses this order.

13. Notion and Concept. Notion and concept are synonyms of idea, the three differing merely in this that *idea* (from *idea*, image) regards a mental representation as a picture — *notion* (from *noscere*, to get knowledge of) views it as that by which we come to know an object — and *concept* (from *concipere*, to conceive) considers it as something to which the mind, as it were, gives birth.

14. Subjective and Objective Concept. The term *concept* is often qualified as either “subjective” or “objective”; and as these two uses of the word have considerable bearing on our subsequent discussions, we must give them some further attention. A *concept*, as just stated, is a mental expression of an object. This is the “subjective” concept; for a mental expression of an object is a cognitive act, and hence something subjective. But the word

“concept” is likewise employed to signify the *object* expressed by the subjective concept, and then it is styled “objective” concept.

To confirm the foregoing remarks by the authority of others, we shall set down the definitions of the “subjective” and the “objective” concept as given by two well-known recent exponents of scholastic philosophy, Fr. Lahousse, S. J. and Fr. Urraburu, S. J.

Fr. Lahousse says:¹ “*Conceptus subjectivus seu formalis definitur: Repraesentatio intellectualis rei alicujus. Res ipsa seu subjectum, quod proprie et immediate per conceptum formalem repraesentatur . . . vocatur objectum ideae seu etiam conceptus objectivus.*” In English: “The subjective or formal concept is defined as the intellectual representation of something. The thing or object itself which is properly and immediately represented . . . by the formal concept is called the object or the objective concept.” Fr. Urraburu writes:² “*Formalis conceptus est actus ipse cognitionis objectum quodlibet repraesentantis; objectivus est objectum prouti tali conceptu expressum. . . . Ita cum bovem concipio, conceptus formalis est meus actus cognitionis, nimirum entitas quaedam spiritualis inhaerens intellectui; objectivus vero est bos ipse intellectus prouti intelligitur;*” that

¹ Praelect. Logic. et Ontol, n.n. 12 & 13.

² Logica, p. 129.

is to say, "The subjective concept is the act of cognition representing some object; the objective is the object as expressed by such a concept. . . . Thus when I conceive of an ox, the subjective concept is my own act of cognition, namely, a certain spiritual entity inhering in my mind, but the objective concept is the ox itself in so far as it is known."

Nor should the employment of the phrase "objective concept" for the thing as known seem strange; for it is not unusual to name the object of an act after that act. Thus a mother will call her little son, "My love," meaning that he is the object of her love.—Many a traveller on first beholding the falls of Niagara exclaims: "What a magnificent sight!" where sight, though it properly denotes the act of seeing, stands for the object of the act of vision. This way of naming a thing by one of its attributes or accompaniments is called metonymy by rhetoricians.

15. Corollary. Such being the nature of the subjective and objective concept it follows that when logical truth is defined to be the *conformity* of a concept with the object as it is in itself, there is question of the subjective concept; for the objective concept being the object as known, is *identical* with the object as it is in itself, and not conformable to it.

16. Material and Formal Object of an

Idea. There are two other expressions intimately connected with those just explained that claim our special consideration, namely, the expressions "material object of an idea" and "formal object of an idea." But first of all we must state what is meant by the object of an idea in general. The word "object" is derived from the Latin verb "objicere" which signifies "to throw or set before." Hence the object of an idea in general is that which is set before the mind by means of the idea, or that which the idea represents. Now this object regarded as it is in itself with all its notes or attributes is called the *material* object of the idea — its subject-matter, as it were. But the particular attribute or assemblage of attributes which the intellect actually represents to itself in the material object is called the *formal* (or proper) object of the idea. The object is thus qualified by the adjective "formal," because the attributes actually perceived in a thing, are, so to speak, the aspects or "formalities" under which the material object is viewed. Hence the formal object is nothing else than the material object considered as to the aspects (or formalities) actually expressed by the idea. To illustrate our definitions by an example: Suppose you see a deer running in a forest and you fix your gaze exclusively, say, on its graceful figure, then this figure will be the formal

object of the idea you have formed of the animal you are observing. Now suppose you note that the creature is fleet of foot and bears antlers, then these peculiarities will become the formal object of the idea you have of the deer. If you view all the three properties named together, all three combined go to make up the formal object of the idea by which you represent the nimble, graceful quadruped before you to your mind. The material object is the same throughout — the entire deer with all its attributes, properties, and qualities as it exists in the physical world.

17. Difference between Idea and Phantasm.

One more point in connection with ideas needs clearing up, namely, the difference between an idea and a phantasm. For there is danger of mistaking the one for the other, all the more as in our present state of corporeal existence, a phantasm in the imagination regularly accompanies the idea in the mind. Phantasms are images of the fancy or imagination. Now since the fancy is an organic faculty (that is to say, a faculty intrinsically dependent on a bodily organ for the exercise of its functions), it follows that its activity is restricted to the representations of sensible, individual objects.

The idea, on the other hand, is a representation in the intellect which is a spiritual or immaterial faculty, i. e., a faculty intrinsically in-

dependent of matter. Hence, being the product of a faculty of an essentially higher order than the imagination, the idea can also express spiritual things (as God, the soul), and likewise *universal* material essences, i. e., essences of material objects in the abstract or shorn of their individualizing characteristics.

18. An Objection Answered. This last remark brings to mind an objection to which it will be well to reply now so as to avoid confusion later on. We asserted that the idea can express material essences. But how is it possible for the idea which is *spiritual* in nature to express the *material*? Should not the substitute and the thing for which it is substituted, be of the same character? We answer; the image need not be of the same nature as the thing imaged any more than the symbol need be of the same character as the thing symbolized. Hence an intellectual image, though neither material and extended, can represent the material and the extended. In an analogous manner, a mirror, though colorless itself, can nevertheless make the beholder see color.—This much regarding the difference between the idea and the phantasm will suffice for the purposes of our treatise; an exhaustive discussion of this subject belongs to psychology.

19. Judgment Defined. It still remains for us to say something about the other operation of

the mind, the judgment, before taking up again the thread of our main inquiry.

Internal experience tells us that the mind often compares two objects of thought (or two objective concepts) with a view of discovering their agreement or disagreement, and that if it perceives them to agree, it unites them by affirmation or assents to their agreement, but if it ascertains that they disagree, it disunites them by negation or assents to their disagreement. The mental process just set forth is called *judgment*. As appears from the description given, it embraces three steps, first, the comparison of two ideas, secondly, the perception of their agreement or disagreement, and thirdly, the assent to either the agreement or the disagreement. Various definitions of judgment have been given, all of which, however, at least implicitly, express these three steps. Here are a few of them: "The act of the mind by which one thing is affirmed or denied of another"—"The operation by which the intellect unites two ideas by affirmation or disunites them by negation"—"The assent of the mind to the perceived identity or discrepancy of two objects of thought"—"The operation of the mind by which two concepts are compared with a view to discovering and declaring their agreement or disagreement."

20. **Essence of the Judgment Determined.**

It is plain that of the three progressive movements involved in a judgment the first, the comparison of two ideas, though indispensable, is merely preparatory to the judgment proper. But what about the other two requirements for the judgment, the perception of the agreement and disagreement and the assent? In which of them does the judgment consist, in the one or the other or in both? This is a question that has been hotly debated. There are some philosophers who hold that the judgment proper is constituted exclusively by the mind's *assent* to the perceived agreement or disagreement of the two ideas compared, and that the perception of the agreement or disagreement—which they choose to designate by the rather unusual name of “comparative apprehension”—is, indeed, a necessary antecedent condition for pronouncing judgment, but not the judgment itself. From this they infer that the judgment proper or the mental assent is *preceded* by an act of perception, but is not itself an act of perception. Hence the judgment can be called knowledge only in so far as it is an act proceeding from the intellect, but not in so far as it is perception. Thus Father Palmieri, one of the upholders of this theory writes:¹ “Si . . . cognitio dicitur apprehensio seu perceptio, actus iudicii non est

¹ Anthropologia, c. 4, a. 6, thes. 36. Cf. Tongiorgi, Psych. n. 490-492.

formaliter cognitio, sed est essentialiter simul cum ea, ita ut si complete spectetur operatio judicantis, ea sit cognitio cum affirmatione et negatione;" that is to say: "If . . . cognition is said to be apprehension or perception, the act of the judgment is not properly cognition, but it is essentially bound up with it, so that, if the operation of the judging agent is regarded adequately, it is cognition together with affirmation and negation." This view has met with considerable opposition, since it seems unintelligible how the judgment, the crowning act of the intellect, can be anything but cognition in the strictest sense of the term.

Suarez's explanation seems to us more consistent with the truth; it is adopted by a large number of philosophers.¹ It makes the judgment consist in the perception of the agreement or disagreement between two ideas. That such is its nature will appear from the following considerations. The judgment is the act which gives *full* satisfaction to the intellect in regard to some point at issue, or, if you will, in regard to the relation existing between two ideas. For the judgment is the perfection of human cognition. (Cfr. n. 52.) Now, as consciousness tells us, the

¹ Suarez, De An. 50, c. 6, n. 4—Lahousse, Psych. n. 327, seq.—Van der Aa, Psych. c. 1, q. 3, a. 2, thes. 14—Liberatore, Log. n. 49—Schiffini, Met. Spec. n. 314—Russo, Sum. Phil. n. 416—Poland, Truth of Thought, n. 48—Maher, Psych. c. 24.

intellect does experience this perfect satisfaction whenever it clearly perceives the relation existing between two ideas; in other words, whenever it clearly apprehends the identity or diversity between subject and predicate. Hence we conclude that the judgment is nothing else than the perception of the identity or diversity between two ideas. Nevertheless mental assent and the perception of identity between two ideas are distinct, not indeed, in reality, but in concept. For when I conceive the judgment as *mental assent*, I draw attention to the intellectual repose peculiar to every judgment, a thing which I do not do when I regard the judgment as the perception of the agreement or disagreement between two ideas.

21. Division of Judgments into Immediate and Mediate, Analytical and Synthetical. Judgments are variously divided; there are, however, only two of these divisions that concern us more directly here. The first is the division of judgments into immediate and mediate. A judgment is *immediate* if the agreement or disagreement between two ideas is recognized immediately without the aid of a third or mediating idea; but it is *mediate* if such a mediating idea is needed in order to discover whether two concepts are identical or not. A judgment of this latter sort (as we know from Dialectics) is the result of the reasoning process. The other di-

vision of judgments to be considered is that into analytical and synthetical judgments. An *analytical* judgment is one in which the agreement or disagreement between two objects of thought becomes apparent by a mere analysis or consideration of the objects compared; if, however, the identity or diversity of two objects cannot be learned except by experience, the judgment is termed *synthetical*. An example of the first kind is, "The whole is greater than any of its parts," and of the second, "The sky is blue."

22. Proposition. The oral expression of a judgment is named a *proposition*; it may be defined as a statement in which one thing (called the predicate) is affirmed or denied of another (called the subject). The term "is" or "is not" signifying the affirmation of the agreement or disagreement between subject and predicate is called the copula (i. e., link). Propositions are distinguished as affirmative or negative according as the copula is affirmative or negative.

23. Return to Main Topic. After these digressions into the field of Dialectics and Psychology for the purpose of smoothing the way for our further investigations, let us now return to our main topic, *truth*. We have completed the explanation of the notion of logical truth or truth of knowledge and are now ready to approach the consideration of its characteristics.

CHAPTER SECOND

THE SUBJECT OF LOGICAL TRUTH

ARTICLE I

LOGICAL TRUTH IN THE SIMPLE APPREHENSION

Summary: The question stated — Thesis — Preliminary remarks to proof: meaning of “form” and “formal” in philosophy — Proof — Answer to objections — First objection — Second objection from the Sum. Theol. of St. Thomas — Scholium.

24. **The Question Stated.** The first question which presents itself for solution is, whether logical truth belongs to all our mental operations. These operations may be reduced to two, simple apprehension and judgment. For, as we just pointed out, reasoning which is treated separately from judgment in *Dialectics* is really nothing else than a form of judgment pronounced with the aid of a third idea (*idea media*) introduced as a means of comparison. Hence the subject matter of our inquiry comprehends simple apprehension and judgment, taking the latter in a broad sense. It is generally

agreed that judgments are logically true; but it has been doubted whether the same can be said of simple apprehension. There are philosophers¹ who believe that this mental act can lay claim to none but *ontological* truth. What their reasons for this assertion are shall be stated after we have explained and proved the common and true teaching on this subject as set forth in the following thesis.

THESIS 2

Logical truth or truth of knowledge, strictly so called, is found in simple apprehension.

25. **Preliminary Remarks to Proof: Meaning of Form and Formal in Philosophy.** Before proving our assertion, we must make a remark relative to the wording of the thesis.

We just stated that simple apprehension can lay claim to logical truth in the *strict* sense of the word. This in the language of the Schools is sometimes expressed by saying that simple apprehension is "formally" true, or contains "formal" logical truth. It will be useful here to explain the signification of the terms "form," "formal," and "formally," as commonly used in scholastic philosophy. These remarks will, we think, prove particularly helpful, because the

¹ Cf. Vasquez, in part. 1. disp. 75, c. 2; also Hervaeus and Durandus in Suarez, disp. 8, sect. 3.

ordinary meaning of these terms is so very different from their technical usage.

The outward form of a material object is, as we all know, one of the chief aids by which we distinguish one body from another. Thus you can readily tell a poplar from a willow, or an oak-leaf from an elm-leaf by their form or contour alone. This explains why the underlying meaning of the word "form" and its derivatives "formal" and "formally" is always that of something modifying, determining, discriminating, differentiating. The substratum in which the form inheres and which it determines is named "matter." Hence "matter" and "form" are correlatives. Thus the "formal" element of a musician is his practical knowledge of music, and the "material," the man himself; for the former modifies or determines the latter.

When we wish to express in plain English, what is implied by the scholastic terms "formal" and "formally," we generally make use of expressions such as these: "precisely," "as such," "in the capacity of," "in the strict sense of the word," and the like. For example, where the scholastic philosopher would say, "*Homo formaliter sumptus Deum amare valet*," "Man taken formally is capable of loving God," the common man would put the same idea in words like the following: "Man as man is capable of

loving God," or, "Man as such can love God," or, "Man in virtue of the characteristics which distinguish him from mere animals possesses the power of loving God." Apply what we have just said to our present case. We asserted that logical truth taken "formally" is found in the simple apprehension. What we mean by this is that logical truth as such, according to its definition, and not merely in a metaphorical sense, is found in the simple apprehension.

26. Proof of Thesis. We shall draw our argument for this thesis from the very nature of simple apprehension.

Apprehension is the act by which the mind seizes on an object intellectually, or, since it does this by assimilating or conforming itself to the object, apprehension may be said to be the act by which the intellect becomes conformable to the object perceived. Now this description of an apprehension tallies exactly with the definition of logical truth properly so called.

In fact, if simple apprehension were not logically true, it would thereby cease to be knowledge. For knowledge is agreement of thought with thing (n. 47), and this is the very definition of logical truth.

27. Answer to Objections. It will be well to strengthen our position by examining the main grounds upon which our opponents deny ideas to be (logically) true and thus put the unten-

ableness of their attitude in a still clearer light.

28. **First Objection.** The chief objection upon which they base their view is, that when the mind merely apprehends something, it does not know its own conformity to reality; and without the knowledge of this, there can be, they claim, no genuine logical truth.

Now we readily grant that the intellect becomes aware of its conformity to reality in the judgment *only*, and not in the simple apprehension. (Cf. thesis 6.) This, however, does not argue against our position in this matter; for the knowledge of that conformity, though indispensable for the perfection and full development of logical truth, is not required for its bare essence. To have logical truth it is enough that the mind should represent an object within itself, as it were, in a mirror. The cognition of the resemblance which the intellect bears to the object, is a feature of truth in its finished state; but it is no more necessary for the *essential* completeness of logical truth than is fully developed growth for a man to be truly a human being. In fact, as appears from the above remarks, the dispute between ourselves and our opponents is verbal rather than real. They take logical truth to be the *cognized* conformity of thought to reality. But we cannot accept their definition thus restricted, since it is acknowl-

edged neither by the majority of philosophers nor by common usage, which is, after all, the last court of appeal in determining the meaning of words. As Horace tells us, it is the "usus, quem penes arbitrium est et jus et norma loquendi";¹ that is to say,

"It is custom, whose arbitrary sway,
Words and the forms of words obey."²

Here we must add a remark to avoid confusion. We stated that the intellect becomes aware of its conformity to reality in the judgment only, and not in the simple apprehension. This does not mean that when the mind forms a simple apprehension, it is not conscious of the presence of the apprehension. It is one thing to be conscious of the presence of an apprehension and another to be conscious of its conformity to reality.

29. **Second Objection from the Summa Theologica of St. Thomas.** By way of further elucidation it will be well to examine an objection here which is sometimes urged against our view. It is a passage from St. Thomas in which he seems to say that the truth of the simple apprehension is that peculiar to things or ontological truth. True, in purely scientific discussions the axiom holds, "Tantum valet auctoritas quantum

¹ *Ars Poet.* v. 72.

² Trans. by Philip Francis.

ratio," i. e., "The weight of a man's authority counts for no more than the reasons advanced by him. However, this does not mean that we must pay no attention whatever to the authoritative opinions of eminent minds. If our opinions run counter to those of men of genius regarding matters falling within their special lines, fairness and good sense demand that we should distrust ourselves and inquire carefully into the grounds for their views. Perhaps we shall then discover that the master has been misunderstood and falsely interpreted. Of course, it is possible that our authority was misled (for no mere man is infallible); in that case, we are not at liberty to follow him, but we are bound to depart from his teaching. Thus we shall avoid at once the Scylla of self-conceit and the Charybdis of that unreasoning adherence to the opinion of a leader which has found expression in the Latin phrases "jurare in verba magistri" and "ipse dixit," and in the Greek equivalent of the latter, *αὐτὸς ἔφα*.

St. Thomas has proved himself by the written works he has left us to be a genius of the first magnitude in matters philosophical; hence we should be very loath unless compelled by the weightiest reasons to depart from any of his positive statements. As a matter of fact it would appear that in regard to the point under discussion he not only does not go against us, but

he maintains the very same view we ourselves put forward.

The controverted passage above referred to,¹ runs as follows: "Veritas igitur potest esse in sensu vel in intellectu quod quid est, ut in re quadam vera, non autem ut cognitum in cognoscente, quod importat nomen veri. Perfectio enim intellectus est verum ut cognitum, et ideo proprie loquendo veritas est in intellectu componente et dividente, non autem in sensu neque in intellectu quod quid est." This extract from the "Summa Theologica" may be rendered thus into English: "Truth is found both in sense cognition and in intellectual apprehension as in a certain true entity; but in neither case is it something cognized by the cognizing agent, and this is the real meaning of truth. For the perfection of the intellect is truth as cognized by the mind; and hence strictly speaking, truth is found in the judgment, and not in sense cognition or mere intellectual apprehension." According to the Angelic Doctor, therefore, truth is found in simple apprehension "ut in re quadam vera," "as in a certain true entity." Does he then consider the truth peculiar to the simple apprehension to be of the ontological order (or truth of being) only? Some philosophers think so, but without sufficient warrant. To perceive the mistake of our opponents,

¹ Sum. Theol. p. 1, q. 16, a. 2.

we must view in its context the phrase which is the bone of contention. Now it is plain from the whole drift of the foregoing citation that St. Thomas wishes to contrast truth as it is found in the judgment with truth as it exists in the simple apprehension. For he tells us: "Hence properly speaking, truth" (i.e., as cognized by the mind or the *perfection* of truth) "is found in the judgment and not in mere intellectual apprehension," because, as we shall show further on (n. 46), it is only through the judicial act that logical truth becomes the object of cognition or is cognized as such by the mind. Consequently what St. Thomas wishes to say in the aforementioned passage is merely this: logical truth does not possess the same degree of perfection in the simple apprehension that it does in the judgment, since truth of knowledge, although contained in the simple apprehension, is not cognized as such by means of it. Now to deny the *perfection* of logical truth to the simple apprehension is not the same as to say that it is devoid of the very *essence* of logical truth.—But why does St. Thomas choose the particular expression "ut in re quadam vera," to characterize the truth proper to simple apprehension? He does so to signify that the truth of the simple apprehension has some points of resemblance with truth as found in things. For just as things (v. g., flowers) are necessarily conform-

able to the divine prototypal idea without, however, being aware of this fact, so in like manner simple apprehensions are necessarily true representations of their objects, without at the same time cognizing this their conformity.¹ (That simple apprehensions are always true will be established when we come to speak of error n. 84.)

30. Scholium. It is plain that simple apprehension, like any other entity, has its own ontological truth; for it is a genuine or true representation of an object, that is to say, it is itself conformed to the conception of an apprehension and so far forth ontologically true. Nor is there anything paradoxical in this assertion, since it is quite possible for an apprehension to be at once conformable to a given type (or ontologically true), and to the object it represents (or logically true). For that matter, the same can be said of judgments, which our opponents admit to possess logical truth.

¹ Cf. Urraburu, *Log. Maj.* c. 2, a. 2, n. 15, *Objec.* 6.

ARTICLE 2

LOGICAL TRUTH IN THE JUDGMENT

SECTION I

GENERAL CRITERION FOR THE PRESENCE OF PERFECT TRUTH

Summary: Complete mental repose an indication of the possession of perfect truth — Thesis — Proof — Requirements for mental repose — Thesis — Meaning of expressions “in actu signato” and “in actu exercito” — Two ways in which the intellect may possess truth — Proofs — An apparent incongruity explained.

31. Complete Mental Repose an Indication of the Possession of Perfect Truth. We have thus far shown that simple apprehension may be rightly regarded as possessing all the essentials of logical truth. The question now arises, is it likewise endowed with that perfection of knowledge at which the mind aims and to which it can attain? This is not an easy matter to settle satisfactorily as it involves a number of principles each of which calls for special consideration. Hence we shall first develop these principles one by one and then give our answer to the above query. But before all we must

endeavor to find some criterion or standard which will enable us to tell whether the mind has arrived at the perfection of truth or is merely on the way to it.

THESIS 3

Complete mental repose is a sure sign that the intellect possesses truth in its fulness.

32. **Proof of Thesis.** To understand the assertion made in the thesis we must recollect that the human mind is made for truth, that it has truth for its end. To become fully convinced of this we need but appeal to consciousness, the faithful witness of our intellectual activities. It tells us that we are eager for knowledge; it further informs us that we are not satisfied with mere knowledge of any sort, but that we crave for knowledge which renders us conscious of perceiving things as they are in themselves; in a word, it informs us that we aim at the possession of logical truth. It is this love of truth which rules the philosopher with an almost despotic hand in his search for the ultimate causes; it is this love of truth which impels the astronomer to sweep the heavens with his telescope, measure and weigh distant planets and calculate their paths; it is this same love of truth which urges the naturalist to study

the book of nature spread out before him and to pry into the secrets of the Universe. The mind then craves and, as it were, hungers for truth; and this is a clear sign that truth is the object of the intellect. For the object of a faculty is that which naturally attracts it.

Now a faculty is never at rest until it possesses the object of which it is in pursuit, because it is only then that it has reached its end. Hence the intellect being a faculty of the soul will be completely at rest only when it possesses its object, truth, in its fulness, that is, to that extent to which it is capable of attaining to truth here on earth; and this is what we purposed to prove.

33. Requirements for Mental Repose. We must next determine under what conditions the intellect experiences this mental repose; for the perfection of knowledge depends upon these conditions.

THESIS 4

The mind does not rest satisfied in its pursuit of truth until it knows that the object in itself is such as represented by the apprehension and until moreover it is conscious of its own conformity to the object.

34. Meaning of Expressions "in Actu Signato" and "in Actu Exercito." Before

proceeding to the proof of our thesis we must first clear up a point closely connected with its right understanding, to wit, the meaning of the turns of speech, "to know logical truth 'in actu signato' and 'in actu exercito'"; for these two stock-in-trade phrases of logicians will frequently occur in our subsequent disquisitions. We shall first assign the general and obvious import of the expressions "in actu signato" and "in actu exercito," and then see how they are to be understood when employed in connection with logical truth.—"Signato" is derived from the Latin "signare," the radical meaning of which is "to mark by words or gestures," "to express or designate." Hence we are said to manifest something "in actu signato" when we manifest it by means of words or some other external sign. We are said to manifest something "in actu exercito" when we manifest it not by word of mouth, but by the performance or exercise of some action. Thus, to illustrate these general statements by an example or two: Our Divine Lord taught us the way to heaven "in actu signato" when seated on the Mount in the midst of the listening multitudes, he showed them the path to a better world by the words of wisdom that fell from his sacred lips. But when raised aloft on the cross on Mount Calvary, he pointed out the road to never-ending bliss "in actu exercito," by his deeds or *acts* of

patience, humility, fortitude, and all the other virtues which he there displayed. To take another less dignified instance; when you are thirsty, you may tell me so in plain words—"in actu signato"—"I am thirsty"; or you may convey the same knowledge to me by the eagerness with which you snatch up a tumbler of water and toss it off. Thus you tell me "in actu exercito," by your way of *acting*, that you are thirsty.

This then is the original or radical import of these phrases. They are, however, sometimes taken in a somewhat wider sense, "in actu signato" denoting the same as "directly," "expressly," "explicitly," etc., and "in actu exercito" being equivalent to "indirectly," "implicitly," "tacitly," and the like.

Now to apply these remarks to the subject of logical truth. I know logical truth "in actu signato" when I perceive the truth of my cognition or the mind's conformity to reality directly or by an explicit judgment. Thus were I to say to myself, "The judgment of mine that the earth revolves round the sun, is true," I would make the mind's conformity to reality the express object of my thought and hence would perceive it "in actu signato," directly, and as it were, in express mental terms. If, however, instead of turning my intellectual gaze inward upon my own judgment by reflection, I consider

directly the object of the judgment, yet so as to perceive, in the very exercise of the judicial act, the mind's correspondence with the object — I am said to know logical truth indirectly, "in actu exercito," in the exercise of the direct act. In this case, I do not pronounce judgment expressly on the mind's conformity to reality; I do so only implicitly, and, as it were, tacitly. Thus — to take up once more the example given before — I have come to the conclusion that the earth revolves around the sun. It is this truth regarded in itself which interests me first and foremost; yet while keeping my mental gaze fixed upon it, I, at the same time, as it were, stealthily, glance at my own mind and perceive that my cognition is conformable to reality. It is in this way that the general meaning of the phrases "in actu signato" and "in actu exercito" must be taken when applied to logical truth.

35. Two Ways in which the Intellect May Possess Truth. There is still another point to which we must call attention before we pass to the proofs of the thesis, namely the two ways in which the intellect may possess truth; for it may either be merely conformable to the object perceived without cognizing its own conformity, or it may, in addition, be conscious of this its conformity. In the former case, truth is simply a property or condition of the intellect; it merely "inheres" in the intellect, as the schoolmen say;

in the latter case, it is likewise the object of the mind, or, in scholastic phrase, it is "objectively" in the mind. Thus, to make our meaning clear by an illustration — a boy may possess a certain endowment, e. g., a talent for music or oratory without being aware of its possession, or he may at once have the endowment and know that he has it.

36. Proof of First Part of Thesis. We now pass to the proof of the thesis. It has two parts; in the first part we assert that the mind does not rest satisfied until it knows the thing to be *in itself* such as conceived by the mind; in other words, until it knows that what it is thinking of exists independently of cognition. To show this, we need only consult our experience regarding our intellectual states, as made known to us by that infallible witness of what goes on in our souls, our consciousness. This tells us that the mind when in search after truth is never at rest until it knows that an object is in itself such as it is represented by the intellect, or, if you will, until it knows that the entity known has being in the real order, and hence independent of thought. To throw a little more light on this rather abstruse point, take an example. Suppose some one were to give expression in your presence to the ideas of "noble-minded" and "interesting," the questions would at once force themselves upon you: "Who is noble-minded?"

“What is interesting?” This is a sign that your intellect is not satisfied with those two ideas alone, and it is not satisfied because those two ideas merely set some attributes before your mind without at the same time telling you that anything is such and such in the real order. But if your inquiry is answered by the information that “your friend is noble-minded” or that “the latest opera is interesting,” your mind is at rest in regard to the two ideas that aroused your curiosity; for you now refer the attributes expressed by the two ideas of “noble-minded” and of “interesting” to their respective subjects “your friend” and “the latest opera,” and thus you know that something is such and such in reality or in the ontological order. (Cf. n. 43.)

37. Another Proof. It will be of help to the declaration of the thesis to subjoin a brief *a priori* argument to the *a posteriori* proof just given.

The intellect from its very nature is capable of knowing things as they are in themselves. It is by means of this capacity that intellectual knowledge excels mere sensitive cognition. Hence the intellect cannot be fully satisfied unless it does know things in themselves. For the full satisfaction of a faculty consists in the exercise of its highest function.

We have shown, then, that for the mind to be altogether tranquil, it must know that the thing

in itself is such as it is represented. However, such knowledge, though required, is not of itself alone sufficient to quiet the mind. This brings us to the second part of the thesis in which we assert that for the intellect to be fully at ease, it must know that it knows the thing as it is apart from cognition, in other words, it must be aware of its own conformity to reality, or, if you will, logical truth itself must become the *object* of cognition.

38. Proof of Second Part of Thesis. [We prove the second part of the thesis thus: Man — as is generally admitted and as is accurately set forth in psychology — is possessed of the power of self-reflection in the highest sense of the word. Hence knowledge of the truth without a reflex knowledge of that knowledge is an intellectual act which stops half-way, and therefore falls short of the perfection proper to the human intellect. Consequently, in order that the mind may rest fully satisfied in the attainment of truth, it must be conscious of its own conformity to reality; in other words, it must know that it knows. Hence whenever I make any certain statement, “as I know” is always contained in it.

St. Thomas confirms the stand we have taken when he says:¹ “*Perfectio intellectus est verum ut cognitum,*” that is, “The perfection of

¹ Sum. Theol. p. I, q. 16, a. 2.

the intellect is truth known as such." (Cf. n. 29.) These words of the Angelic Doctor might be paraphrased by a citation from Cardinal Newman. True, the Cardinal in the passage we are about to quote speaks expressly of certitude, but as certitude is practically the same with perfect logical truth (see n. 60), the extract is quite to the point. Here is what he says:¹ "Certitude . . . is the perfection of a truth with the perception that it is a truth, or the consciousness of knowing as expressed in the phrase, 'I know that I know,' or 'I know that I know that I know,' or simply 'I know'; for one reflex assertion of the mind about self sums up the series of self-consciousness without the need of any actual evolution of them."

39. An Apparent Incongruity Explained.

We find it necessary to draw attention here to an apparent incongruity in the exposition of our doctrine, which unless removed might envelop the proofs of this and of the preceding thesis in an unwelcome haze.

We have stated again and again that the human mind rests satisfied when in the full and perfect possession of truth. But how can this be? Is not the full possession of truth peculiar to the omniscient God alone? And is not man's craving for truth, at least so long as he lives upon earth, insatiable? When I have satisfied

¹ Grammar of Assent, Crown Edition, p. 197.

myself on one question are not a number of others at once suggested by the solution of that very question? How then can all our former assertions stand? Are they not built on sand?

The objection rests on a misunderstanding. For when we say that truth is found *complete* in the judgment or that the mind rests *fully* satisfied when it possesses truth in its *perfection*, we do not mean to assert that we can ever know a subject exhaustively, or that we can ever arrive at a stage of knowledge beyond which we do not care to pass. No, what we want to express by these and similar turns of speech is, that in a true judgment the mind is fully conformed to a thing under a certain aspect, namely in regard to the "formal object" expressed by the predicate, and that it perceives its conformity clearly. Thus when I state in technical language, "The judgment, a deer is a graceful animal, contains truth in its fulness or perfection," I mean to say no more than this: "I clearly perceive my mind's conformity to a deer as regards the attributes expressed by the predicate of the judgment." All else lies beyond my present scope of investigation.

SECTION 2

CONDITIONS FOR PERFECT TRUTH OBTAIN IN
THE JUDGMENT ALONE

Summary: First condition for perfect truth—Thesis—Preliminary remarks—Proof—Confirmation—Process of attaining to perfection of truth—An objection—Inclusion of predicate in the subject—Second condition for perfect truth—Thesis—Preliminary remarks: various meanings of knowledge—Proof of first part—Another form of this proof—Proofs of second part.

40. First Condition for Perfect Truth. We must now go a step further and ascertain in what operation of the mind the conditions for the perfection of truth are fulfilled.

THESIS 5

It is in the judgment, and not in the simple apprehension, that we know an object to be such in itself as we conceive it.

The thesis might also be expressed in other words thus: It is through the judgment *alone* that an object is known to be such in reality as it is conceived, or, briefly, it is through the judg-

ment *alone* that an object is cognized as objectively real.

In developing this thesis we shall first give our reasons in its support and then point out by what process the mind when pronouncing judgment cognizes an object as objectively real.

41. Proof of Thesis. To bring home to ourselves this superiority of the judgment over the simple apprehension (or idea) we must again appeal to consciousness. For we are here dealing with mental phenomena which can become known to us by consciousness alone. Let us take a simple case and analyze it. Suppose you conceive the two *ideas* "sweet" and "sugar." You, indeed, behold the two objects before your mind's eye, but whether they are anything in the real order, these ideas alone do not tell you any more than the compound notion "winged horse" informs you of the reality of the thing represented by it. As soon, however, as you form the judgment, "Sugar is sweet," you know at once that the object called "sugar," as it is in itself apart from the intellect possesses the property expressed by the predicate "sweet."

In confirmation of the foregoing statement we quote a sentence from Father Van der Aa, S. J., in which he summarizes¹ the opinion of certain philosophers in these words: "In iudicio mens perceptionem suam refert ad ordinem objecti-

¹ *Logica Objectiva*, c. I, q. I, prop. 4. n. 3.

vum; unde dicendo explicite v. g., 'toto minor est pars,' dico implicite: 'et hoc ita est in ordine objetivo';" which may be thus translated into English: "In a judgment the mind refers its own perception to the objective order of things; hence when I say explicitly, e. g., 'the part is less than the whole' I say implicitly, 'and this is so in the objective order.'" Even philosophers otherwise not partial to scholasticism regard the judgment in the same light. For instance, Mr. F. H. Bradley¹ says: "The judgment refers off one compound idea to the region of reality." "Thus," comments Father Rickaby² on this assertion, "'The wolf is eating the lamb,' is interpreted as assigning over to reality the compound notion of wolf-eating-lamb; wolf-eating is a reality or fact."

42. Confirmation of Thesis. We might still further corroborate our contention by an inspection of the nominal definition of the phrase "simple apprehension." For a good definition of a word tells us what the thing signified by the word is held to be by men in general, or, at least, by those competent to judge. Now simple apprehension is often described as the operation by which the mind merely expresses what a thing is without giving us any further information regarding it.³ According to this definition, then,

¹ The Principles of Logic, cc. 1 and 2.

² The First Principles of Knowledge, l.c.

³ Pesch, Inst. Log. v. 2, p. 797.

simple apprehension only makes known to us what elements go to constitute a thing, but it leaves us in ignorance, whether the thing is so in the real order. Now, as a matter of fact, we do know things to be such in the *real* order as we conceive them, and as we do not become aware of this by means of the simple apprehension — for it shows us merely the attributes which make up a certain object — we must do so by means of the other operation of the mind, the judgment.

43. Process of Attaining to Perfection of Knowledge. It now remains to show how the mind arrives at the perfection of knowledge through the judgment. To make this point clear let us resolve the judgment into its constituent elements; they are the subject, the predicate, and the copula. Of these elements the subject stands for the thing as it is in itself, the predicate expresses the attributes by means of which I know the subject or represent it to myself, and the copula declares the subject and the predicate to be identical. Now it is thus, namely by identifying the subject (the thing in itself) with the predicate (what I know of the subject) by means of the copula that I know a thing to be in itself such as it is conceived by the mind.

To explain by an example; when I pronounce the judgment “Patrick Henry is a distinguished American orator,” I identify “Patrick Henry”

— a reality existing in the objective order of things — and “distinguished American orator” — something I know of that reality; and it is in this manner that I know Patrick Henry to be in the objective order of things as I represent him to myself. (In the explanation just given we have restricted ourselves to affirmative judgments for the sake of simplicity; but the same holds true of negative judgments, “*mutatis mutandis*.”)

But how do I know that in a judgment the subject stands for the thing as it is in itself, and the predicate, for some attribute by means of which I know the subject or represent it to myself? I reply, I know this through consciousness, as an analysis of any judgment will show. For when I affirm e. g., “Grass is green,” I mean to say merely this, “The objective reality called ‘grass’ possesses the property represented by the idea which the term ‘green’ signifies.”

44. An Objection. But here we are confronted by an objection. We have said repeatedly that in judgments we know things as *objectively real*. This, however, does not seem to be universally the case. For example the proposition, “A triangle is a figure bounded by three sides,” is true even though no triangle ever existed; and the statement, “Man is a sentient, rational being,” was true even before the advent of man. In neither of these instances do we

conceive anything as objectively real, and yet both these judgments are true. Are not these and similar exceptions fatal to our position in this matter?

Our reply is, they would be if they were genuine and not merely apparent exceptions. For the objection supposes that through the judgment we always cognize things as *physically* real or as *actually* existent; we do not say this. All we maintain is that through the judgment we know things as pertaining to the *objective* or *ontological* order. Now the *ontological* order is opposed to the order of *mere cognition* (the "intentional" order). Whatever has being or is something independently of thought belongs to the ontological order of things, even though it does not exist actually, but is merely something possible. Hence whenever I conceive anything as opposed to myself, the *thinking* agent, or as contradistinguished from my cognition, I conceive it as pertaining to the ontological order, and therefore as real or (more explicitly) as objectively real. That such usage of the term "real" is not foreign to the English language, is borne out by our Dictionaries. Thus, the "Century Dictionary" gives the following as some of the meanings of "real" taken philosophically: "Pertaining to things, and not to words or thought only,"—"being independent of any person's thought about the subject,"—"not result-

ing from the mind's action, opposed to imaginary or intentional."

Note, however, by way of caution, when we say that an object is known as objectively real in the judgment *only*, our meaning is not that the content expressed by the simple apprehension is not real. It is. Only it is not cognized as real by means of the simple apprehension.

45. Inclusion of the Predicate in the Subject. The question here naturally suggests itself whether the subject expresses the predicate and to what extent. To this we reply with a distinction. When we have to do with *synthetical* judgments, i. e., judgments resting on experience, the idea of the subject is altogether silent about the predicate. Thus the subject "Henry" in the proposition, "Henry is singing," in no way includes the predicate "singing," which lies entirely outside the subject "Henry." In *analytical* judgments the case is different; in these, the idea of the subject does, in some way, involve the predicate, not, however, distinctly, but in a vague manner. Thus when I say, "Every contingent existence must have a cause," the subject, "contingent existence," contains the notion "having a cause," not, indeed, expressly, but by implication. And this is just what we should expect. For the purpose of the subject is merely to take the place of an object as existing in the sphere of

reality. It is the predicate that furnishes the information regarding the subject, or expresses clearly and definitely what the subject intimates at best only dimly.

46. Second Condition for Perfect Truth.

We have proved then that in the judgment we know an object to be such in itself as we conceive it; and this is the first of the two conditions to be satisfied in order that the mind may be fully at rest in the possession of truth. It remains for us to show that the other condition for complete repose in truth (cf. thesis 4), is likewise satisfied in the judgment. [This we shall do in the next thesis.

THEESIS 6

It is in the judgment, and in the judgment alone, that the mind knows that it knows.

47. Introductory Remarks: Various Meanings of Knowledge. Before we enter upon the proofs of the thesis, it may not be amiss to examine a little more closely into the meaning of the words "knowledge" and "knowing."¹ This investigation will aid us in a clearer understanding of the question at issue into which the concept of knowledge enters as an integral part.

¹ Cf. Lahousse, *Psych.* n. 150; Pesch, *Inst. Log.* v. 2, n. 90.

Knowledge, in general, is the assimilation of the mind to the object apprehended, or, if you will, it consists in this that the intellect conforms itself to an object by expressing that object within itself. Now knowledge may be threefold according to the less or greater perfection of the mental assimilation. There may be merely intellectual conformity to the object unaccompanied by any affirmation or negation; or the mental conformity may be of such a character that by means of it the mind perceives and affirms something to be so or not to be so; or lastly, this same mental conformity may moreover render the intellect conscious of its assimilation to the object.

Lest these various meanings of knowledge seem arbitrarily devised by us and not according to the customary use of the vernacular, it will be well to bring forward our warrants for them from two of our best dictionaries, the "Standard" and the "Century." Thus the "Standard" says: "Knowledge is the agreement of thought with thing." These words define the lowest degree of knowledge. It further states: "It is of the very essence of knowledge that it apprehends or cognizes its object to be." This is a description of the next step in the acquisition of knowledge. And lastly, we are told by the same authority: "Knowledge is the conviction or assurance, arising from evidence that

our mental apprehension or perception agrees with reality"; or as the Century puts it more briefly: "To know means to be conscious of perceiving the truth." Here we meet with a clear and concise account of knowledge in its highest perfection.

48. Proof of First Part of Thesis. We now pass to the proof of the thesis. We shall divide it into two parts: in the first part we shall point out that in a judgment the intellect not only knows things, but also that it knows that it knows them; and in the second part we shall show the contrary to be the case in a simple apprehension.

Our argument proceeds thus: In a judgment the intellect affirms something to be such and such, e. g., the rose to be sweet-smelling. But it could not do this unless it knew, at least implicitly, its own conformity to reality. For if such knowledge did not accompany the intellectual perception, in so far our judgment would be blind, and hence irrational and unworthy of man. But to say that the intellect cognizes its own conformity to reality is the same as to say that it knows that it knows. For conformity of the mind to reality is knowledge. In the judgment then the intellect knows that it knows.

St. Thomas expresses the same thought by saying that truth is found in the judgment "ut

cognitum in cognoscente,"¹ or in English, "as cognized by the cognizing agent."

Of course, what ultimately enables the mind to perceive its assimilation to the object of thought is the *evidence* of the truth affirmed. For all true knowledge hinges in the last resort on objective evidence.

As stated in the proof, in order to know that we know we need not advert to the mind's conformity with reality explicitly (in actu signato); we can cognize this conformity sufficiently by an implicit act of cognition (in actu exercito). For the human intellect is so constituted that by one and the same act it knows directly that a thing is so, and indirectly, that it is conscious of the correctness of its knowledge.

What we have said of affirmative judgments applies, of course, to negative judgments as well. For when we make a denial, we assert directly that something is not so, and indirectly, that our minds judge correctly that it is not so.

49. Another Form of the Proof. The first part of our thesis might also be presented in another form thus: As was stated before, the subject of a judgment stands for a thing as it is in itself, and the predicate stands for the same thing as conceived by the mind. Hence when in making a judgment I refer the predicate to

¹ Sum. Theo., p. 1, q. 16, a. 2.

the subject, I perceive the identity between a thing as conceived and the same thing as it is in itself, and so I come to know that my mind is conformable to the thing as it is in itself. To illustrate this rather abstruse argument by an example: If I know a certain photograph to be an exact likeness of the dome of St. Peter's in Rome, I likewise know that my mind which conceives an idea from the photograph is thus conformable to that dome as it is in itself.

50. Two Proofs for the Second Part of the Thesis. It still remains for us to show that the simple apprehension falls short of that perfection of knowledge which we have shown to belong to the judgment. This follows as a corollary from the preceding thesis. For as we saw there, it is in the judgment alone that the mind can know a thing to be such in itself as it is conceived, and hence it is in the judgment alone, and not in the simple apprehension, that the mind is able to refer its own knowledge to the thing as it is in itself.

We can likewise arrive at the same conclusion by a direct appeal to consciousness. For as this witness of our intellectual phenomena informs us, a mere apprehension or idea simply renders a thing present to the mind, but it tells us nothing as to whether the mind is or is not conformable to the thing as it is in itself. Thus the idea of a broken stick, which I formed on

seeing a stick plunged into the water, merely puts a certain object before my mind, but it in no way expresses whether there is anything outside the intellect corresponding to my idea of broken stick.

SECTION 3

PERFECTION OF TRUTH IN THE JUDGMENT ALONE

Summary: The question stated — Proof — Confirmation from St. Thomas — An abridged form of proof — Corollary — Scholium — Preliminary remarks: the term “sign” explained — Second proof — An objection — Difference between logical truth and certitude — Difference between the repose in perfect truth and the repose in certitude.

51. The Question Stated. We now come to the final step in this discussion for which all that has been hitherto said may be regarded as a preparation.

THESIS 7

Truth of knowledge reaches its highest perfection in the judgment, and in the judgment alone.

52. Proof. This statement is proved thus: Truth of knowledge reaches its highest perfection, when the mind is fully conformed to an object in so far as that object is apprehended,

or, in other words, when the process of intellectual assimilation to a certain aspect of an object has been carried as far as it can be carried. Now we have proved (thesis 3) that when the mind finds complete rest in its strivings after truth, intellectual assimilation has been pushed to its utmost limit. We have further shown (thesis 4) that the intellect does not enjoy this perfect repose until it perceives a thing to be such and such in reality and until it cognizes its own conformity to the real order of things; in other words, until it knows that it knows. Now these conditions for full mental repose are fulfilled in the judicial act alone, and not in the simple apprehension, as appears from theses 7 and 8. Therefore we conclude that in the judgment alone truth of knowledge reaches its highest perfection; the simple apprehension contains truth, as it were, in germ; but in the judgment that truth comes into full bloom.

In the major premise of our proof we require for perfect (logical) truth mental conformity to the object "in so far as the object is apprehended," or conformity "to a certain aspect, phase or view of the object." These restrictions of the object of knowledge emphasize the fact that to arrive at the perfection of truth, it is enough for the mind to be fully conformed to the so-called "formal object of an idea" or to "the object as apprehended by the mind";

conformity to "the material object of thought," i. e., to the object as it is in itself with *all* its properties and qualities, is neither necessary for the possession of truth nor, in most cases, possible.

53. Confirmation from St. Thomas. To sum up in the words of St. Thomas all that we have hitherto said:¹ "Perfectio enim intellectus est verum ut cognitum. Et ideo, proprie loquendo, veritas est in intellectu componente et dividente, non autem in sensu neque in intellectu quod quid est"; that is to say: "The intellect has reached its perfect state when it knows (logical) truth; and, hence, properly speaking, truth is found in the judgment, but not in sensation nor in the simple apprehension." (Cf. n. 29.)

54. Abridged Form of Proof. The preceding argument may be given in an abridged form thus: The perfection of logical truth is reached when the mind's restlessness in its search after some truth is stilled. Now, as a mere appeal to consciousness tells us, this takes place in the judgment and in the judgment alone.—This mode of arguing is conclusive, but as it disregards the grounds of the intellect's repose in the possession of truth, it is less thorough and hence less philosophical.

55. Corollary. We infer as a consequence

¹ Sum. Theol. p. I, q. 16, a. 2.

from our thesis that in every judgment the mind reflects at least implicitly (in actu exercito) upon its own state. Because, as we often stated before, in judging we know that we know, and our knowledge cannot thus become the object of our thought without some exercise of reflection.

56. Scholium. It might be useful to call attention here to the difference between a judgment and a compound idea (strictly so called), between "Socrates is a philosopher" and "the philosopher Socrates": on account of some points of resemblance between the two they may be easily confounded, as has been actually done by several modern writers who choose to regard the judgment merely as a combination or fusion of two ideas. This Mansel would seem to do when he defines a judgment as "a combination of two concepts, related to one or more common objects of possible intuition."¹ The difference between judgments and compound ideas may be stated thus: When forming a compound idea, the mind simply juxtaposes two ideas — puts one alongside the other; but when it judges, it moreover affirms the one of the other, it perceives and declares them to be identical, or, if you will, a compound idea represents together two (or more) attributes, which may be, or, in point of fact, are identical; but

¹ Prolegom. Log. p. 60.

here it stops short, it does not proceed to represent them as identical and to pronounce them to be so; this is done only in the judgment. Hence we see that there is a vast difference between a judgment and a mere compound idea.

57. Preliminary Remarks to Second Argument: The Term "Sign" Explained. We subjoin a second argument of the thesis drawn from the "sign" or oral expression of ideas and judgments. But in order to appreciate the force of the proof we are about to give, we must first say a few words about the notion of "sign" in general and its relation to what it signifies.

A sign according to the ordinary acceptation of the word is anything that represents to the mind something distinct from itself. Thus smoke and laughter are signs, the former of fire and the latter of mirth. That characteristic of a sign which enables it to suggest to the cognitive faculty something distinct from itself is styled its power of signifying. Some signs possess this power from their very nature and hence are called *natural* signs, whilst others have received this same power from men by common agreement and hence have been styled *conventional* signs. Thus smoke and laughter indicate fire and mirth respectively of their own nature, independently of the will of man; and it is on this account that they are understood by any one endowed with reason. Examples of con-

ventional signs are the flags of different nations, the ringing of bells for various purposes, and especially the spoken word.

Since a sign is of this nature, it shows both what a thing is and what it is not. To explain our meaning by a few illustrations: The huntsman can readily tell from the footprints left in the snow whether the animal the trail of which he sees before him had hoofs or claws or was web-footed.—If the impress of a signet ring fails to show a wreath or coronet in the sealing wax we are entitled to infer that neither the one nor the other of these devices is engraved on the seal.—These two instances are instances of natural signs; but as our argument turns on words and propositions, both conventional signs, let us add an example of that kind of sign. The flag of the United States of our day (1913) displays forty-eight stars in the upper corner next to the flagstaff, indicative of the number of States at present in the Union. Should you ever happen to see the flag of an earlier date, say of the year 1777, you may observe that it bears only thirteen stars in the field, thus showing that the number of States was then only thirteen. Hence our national symbol, both by the presence of certain marks and the absence of others, gives you information in regard to the present and the past condition of the country, e. g., it tells you that now there are forty-eight States in the Union

and no more, and that in 1777 the States numbered thirteen and no more.

Let us now pass from the symbol of our country to words and propositions, the symbols of thought and see what argument we can build on them for the purpose of our proof.

58. Second Proof of Thesis. We know from experience that it is impossible for one mind to hold immediate communication with another. No one can unveil his thoughts to his fellowmen without the intervention of external signs of some sort. The ordinary intermediaries between mind and mind are words and propositions; they are, so to speak, the representatives of our mental acts, the messengers of our thoughts. "Habes animi nuntia verba mei," says Ovid.¹ This being so, we are justified in concluding from what is or is not contained in words and propositions to what is or is not contained in our thoughts. Now any man of common sense will tell you that when you pronounce a number of detached words, you say nothing that is either true or false. He will tell you that the words you utter one after another without connecting them by the copula "is" and "is not," call up certain images in his mind, and nothing more. As soon, however, as you combine your words into propositions, he will declare your statements to be true

¹ Her. 16, 10.

or false or dubious. Suppose you hear some one pronounce in succession the following terms, "mercy"—"strained"—"gentle"—"rain"—"place"—"twice"—"blessed"—"him" . . . you will understand the meaning of the words uttered, but you will not think that the speaker has given expression either to a truth or a falsehood. But note the difference when those words are joined into sentences as follows:

"The quality of Mercy is not strain'd,
It droppeth as the gentle rain from heaven,
Upon the place beneath. It is twice bless'd;
It blesseth him that gives and him that takes."

We have here one of the truest delineations of the excellence of Mercy in all literature.

Since then propositions (the signs of judgments) do, and words (the signs of ideas) do not beget the knowledge which we regard as true in the *highest* sense of the word, we rightly infer that judgments alone possess that conformity with reality which can be dignified with the title of truth "par excellence."

59. **An Objection.** But, some one might ask, is it universally true that a sign expresses *all* that is in the thing signified? It would not seem so. Take the case of the sealing wax; it does not express e. g., that the signet ring is made of bronze. Hence, might not ideas possess per-

fect truth, even though words, their signs, do not indicate it?

To this we answer that a genuine sign must and does express all that of which it is the sign, but no more. The impression in the sealing wax is the sign of the figures and characters in the ring, and not of the material of which the ring is made. Thus, in like manner, words and propositions are signs of the truth which is in the mind. This is apparent from the fact that we can communicate to others such truth as our ideas and judgments possess if we choose to do so. Now such a thing would be impossible if speech did not faithfully convey the truth of our cognitions to those we address; for as we cannot look into other people's minds directly, there is but one way of holding intellectual intercourse with them, namely by means of language.

60. Difference between Logical Truth and Certitude. To avoid confusion and misunderstanding we wish to call attention here to the difference between logical truth and certitude; for the two stand in very close relationship.

Logical truth *in general* is a broader term than certitude. For certitude is proper to the judgment alone, but logical truth is found in the simple apprehension as well. Further a judgment may be true without being certain, but it cannot be certain without being true.

As regards *perfect* logical truth, however, the

case is otherwise. Perfect logical truth and certitude are, in point of fact, the same mental state; they differ from each other only in the manner in which this mental state is viewed. For *perfect logical truth* is the clear knowledge of the mind's conformity to reality, and *certitude* is the firm mental adherence to a judgment without any dread of error. Now whenever the intellect in a judgment knows itself to be in accord with reality, it necessarily adheres to that judgment firmly and with entire assurance. We might therefore say that perfect logical truth, of its very nature, implies certitude, and certitude essentially presupposes perfect logical truth. The two consequently denote the same intellectual condition with this only difference, that perfect logical truth emphasizes the mind's conformity to reality, and certitude lays stress on the firm mental adherence to a judgment expressive of reality.

61. Difference between the Repose in Truth and the Repose in Certitude. In this connection another question touching the difference between perfect logical truth and certitude might be proposed. Is the *quiet of mind* by which perfect logical truth as well as certitude are recognized, the same in both instances or not? We answer, it is not. For the quiet of mind accompanying the full possession of logical truth, results from the attainment of the object aimed at

and implies a cessation of further striving or exertion; while the quiet peculiar to certitude, follows upon the exclusion of doubt or fear of error, and hence should rather be called intellectual security or assurance. To illustrate: A traveler on completing his journey feels satisfaction both because the continued exertions incident to his travel are at an end, and also because he has not gone astray and missed his destination. The former satisfaction corresponds to the quiet the mind experiences at having fully attained its object, truth, and the latter, to the security the intellect feels on knowing that it is not mistaken.

CHAPTER THIRD

DEGREES OF LOGICAL TRUTH

Summary: Introductory remarks—Truth in itself without degrees—Thesis—Proof—In what sense ideas and judgments admit degrees—Thesis—Preliminary remarks to proof—Proof—Scholium—Sense in which judgments can become false—Degrees in the (subjective) source of truth—Thesis—Proof—Limitation of thesis—Meaning of intellectual light—Critical examination of views of opponents—Evolution of knowledge—Infinite knowledge incapable of evolution.

62. Introductory Remarks. Our previous investigations have led us to the conclusion that the judgment excels the simple apprehension as regards logical truth. It would seem, then, that logical truth is capable of being perfected. But how can this be, considering that logical truth consists in the exact conformity between thought and thing? We are thus brought face to face with the problem of the possibility of degrees in logical truth. Can one idea or judgment be truer than another?

The question regarding the degrees in logical truth may be viewed in two ways; it may be asked whether logical truth as *such*, i. e., considered as conformity between thought and thing has degrees, or, inquiry may be made whether logical truth, though not admitting degrees in itself, may at least be *regarded* as admitting them by reason of its connection with something which is subject to variations. In the latter case truth would be susceptible of degrees in a figurative sense only, or, as the scholastics express it, by an "extrinsic denomination," i. e., on account of something extrinsic to truth as such. To illustrate by an example: A souvenir left us by our parents is deemed worthy of esteem, not for its *intrinsic* worth, but for its *extrinsic* association with father and mother.

63. Truth in Itself without Degrees. We shall begin by investigating whether the relation of truth viewed in itself admits of degrees.

THESIS 8

Logical truth, regarded in itself, that is, regarded as conformity between thought and thing, does not admit of degrees.

64. Proof of Thesis. This assertion is proved thus: Logical truth regarded in itself denotes conformity, not in the sense of mere re-

semblance, but in the sense of perfect correspondence or equality. The idea and the judgment considered as true are not merely similar to their respective objects, no, they are facsimiles, counterparts of them. Now conformity in the sense of equality cannot vary and therefore cannot admit of more and less. Any change made in one of two equal things will result in the annihilation or destruction of their equality. An infinitesimal change in the lengths of one of two equal measures will render them unequal. Our imperfect senses may not perceive the inequality, yet it is there all the same. Hence truth, consisting as it does in a relation of equality, cannot admit of degrees.

The same argument may also be presented under a slightly different form in this way: Equality between two things, no matter where it is found, is always the same. Thus one mile is no more equal to another than one inch is to another. Miles and inches, in so far as they are equal, do not differ in the least. Now where there is perfect sameness, we cannot conceive of degrees. Hence truth regarded as such, i. e., as a relation of conformity between thought and thing, is not susceptible of more and less.

65. In What Sense Ideas and Judgments Admit Degrees. Why then is one idea or judgment often called truer than another? Be-

cause the truth of the idea and that of the judgment are each intimately connected with something admitting of degrees, as we shall explain in the next thesis.

THESIS 9

Ideas are rightly said to be more or less true by reason of their (material) objects, and judgments, by reason of their subjects.

66. **Preliminary Remarks to the Proof.** In regard to the first part note: The "material" object of an idea, it will be remembered, is the object as it is in itself with all its attributes and determinations; it is so named in opposition to the "formal" object, by which is meant the particular attribute or attributes that the mind conceives in the material object. It follows from what we have said that ideas can never be more or less true in regard to their formal (proper) objects, since to these they are always perfectly conformable. But the same does not hold true in respect to the material object, as we shall now proceed to point out more in detail.

67. **Proof of First Part of Thesis.** Every body will readily admit that one idea may express more attributes of one and the same object than another. Thus, I can conceive the same violet as a substance, as a body, as an organism, as a flower, as a symbol of modesty.

Now of two ideas regarding the same object, the one expressing more attributes is rightly called more conformable to the object and therefore *truer* than the one manifesting fewer attributes, because the former is a fuller and more exhaustive representation of the (material) object than the latter. Hence it is correct to call ideas more or less true by reason of their (material) objects.

68. **Proof of Second Part of Thesis.** The argument in regard to judgments is developed in a similar way.—One judgment may predicate more attributes of a given object than another. Now the judgment that assigns more attributes to an object is more conformable to the object; this makes it also truer. But the object of predication in a judgment is called *subject* and therefore it is on account of the subject that one judgment is truer than another. Thus the judgment, “Socrates is a Greek philosopher,” may be called truer than the other, “Socrates is a man.” In like manner when I say, “This sketch is a truer characterization of Christopher Columbus than that,” I mean that both characterizations are, indeed, correct descriptions of the discoverer of America, but that the one discloses his traits more fully than the other. To illustrate by analogy: We call one of two portraits taken of the same person truer than the other, not because the first distorts the features

less than the second, but because the one brings out the lineaments of the face to a greater degree than the other.

What we have said of affirmative judgments can readily be applied to such as are negative.

69. Scholium. For the sake of greater completeness we would add here that the scholastics ascribe degrees to logical truth on account of the more or less close connection between the subject and the predicate. Thus according to them, the judgment, "The whole is greater than any of its parts," is truer than the other judgment, "The rose-bush is covered with dew"; for the nexus between "whole" and "greater than any of its parts" is unchangeable, whereas that between "rose-bush" and "covered with dew" is not; the former judgment can never become false, the latter can.—It would seem, however, that in English we cannot express ourselves thus. We may, indeed, say that the truth of the one judgment is altogether fixed and invariable, and that of the other is not; but we cannot call one judgment truer than another for this alone that the one can be false and the other cannot.

70. Sense in Which a True Judgment Can Become False. Attention must be drawn to a special difficulty much discussed by the scholastics. Is it possible for a judgment which is true ever to become false? Our answer is, yes

and no; no, if the matter of the judgment is determinate in every particular; and, yes, if the subject of the judgment is left vague to some extent, so that it can receive opposite predicates under varying conditions. Thus take the proposition, "My brother is sick." If the subject "my brother" is considered in reference to a definite time, say to this moment, that proposition, if true now, will remain true forever. But suppose we regard the subject "my brother" somewhat indefinitely, not adding the circumstance of time, then the sentence "my brother is sick," though true now, may be false to-morrow, because my brother may in the meantime be restored to health.

71. Degrees in the (Subjective) Source of Truth. We have shown then in what sense logical truth admits degrees, as regards the material object of an idea and the subject of a judgment. It remains for us to see whether something similar can be said in respect to the intellect in which the conformity to an object resides.

THESIS 10

Logical truth admits of degrees in its (subjective) source, i.e., in the intellect's power to know the truth.

72. Proof of Thesis. To realize the correctness of this statement, note, first, the great in-

equality of mental endowments amongst men; for the more gifted a person, the better fitted he is for the acquirement of truth. The man of genius ranks highest, the man of talent comes next, then the man of ordinary intellectual caliber and last of all, the man slow of understanding. Thus we observe a regular gradation of intellectuality from the most richly gifted to the most scantily endowed. Further, the native ability of each one for intellectual work and for the acquisition of truth can be greatly improved by cultivation: thus the mind attains to clearer and more distinct ideas, and becomes better fitted for intellectual work. For what a sharp edge is to the blade of a knife, clear ideas are to the power of the understanding. Lastly, the capacity of the mind for knowledge depends, to a great extent, on the light that pours in upon it from without. For just as material light enables the eye to see objects round about it, so intellectual light enables the eye of the soul to discover hidden truths and perceive more lucidly those it is already acquainted with. Now the light coming to the soul from without consists in the motives or reasons for a truth. These motives reveal truth to the intellect as physical light reveals material objects to the eye. Hence the more numerous the motives for a truth, the more perfectly the intellect grasps it. This is the reason why a well-informed person can solve

difficult questions more satisfactorily than another more gifted but less well informed.

73. **A Limitation of the Thesis.** It must be confessed, however, that in English ideas and judgments are not *called* more or less true merely because the intellectual powers of the cognitive agent are more or less perfectly equipped for the attainment of truth. This can, of course, only be shown by an appeal to the common usage of the English tongue. We would not say, for instance, that the judgment, "Children should love and honor their father and mother," is truer when made by the teacher than when made by the pupil, just because the teacher's intellect is keener and better trained. When we wish to express the superiority of one mind over another in its mental operations, we employ forms of expression like the following: "The mind of an intellectual and well-trained man is more active, more accurate, quicker, surer in its judgments than the mind of one of less mental vigor and less development," or, "The judgment of a bright mind is more luminous and perfect than the judgment of a less bright mind," etc.

74. **Meaning of Intellectual Light.** It might be useful here to explain more fully the meaning of "intellectual light." The primitive meaning of the word "light" refers, of course, to that form of radiant energy which

acts on the retina of the eye and renders visible the objects from which it comes. From the world of sense the term has been transferred to the domain of the intellect, where it has a two-fold meaning. First, it denotes the reasons or grounds which may be assigned for the truth of a statement; for the motives render a proposition intelligible, i. e., perceptible by the intellect, just as the light-rays make an object visible, i. e., perceptible by sight. Hence it is that we speak of putting a subject in a clearer *light*, of throwing *light* on a subject, of letting in *light* upon the intellect, etc. And it was in this sense we took the expression in the proof of the thesis. But "light" in reference to the mind likewise denotes the intellectual faculty itself in so far as it is receptive of (objective) light or capable of seeing what is in itself intelligible. This spiritual light too has its counterpart in the sensible order. For "the sensation produced by exciting the eye" and "the power of perception by vision" are also called light, as our dictionaries attest. The term light is thus used in Psalm xi.10: "My heart is troubled, my strength has left me and the light of the eyes itself is not with me." It is in this same way that God is called "light" par excellence in the intellectual sphere, because he is knowledge by His very essence and the author and source of all created knowledge. Thus we read in I John 1.5: "God is light and in him

there is no darkness." Similarly we speak of the light of glory, which is a supernatural quality communicated to the Blessed in heaven and enabling them to see the Divine Majesty face to face.

75. Critical Examination of Views of Opponents. To ward off the attacks of false philosophy on our doctrine, it will not be inopportune briefly to examine the views of those who consider logical truth in itself to be changeable, thus placing themselves in direct opposition to our teaching in this matter. These men tell us that there may be intellects elsewhere differently constituted from our own, holding as true the very opposite of what appears true to us; nay, more, they assure us that in the process of evolution what is true for us to-day, may, without any change in the object known, become false. We of this generation, they say, feel sure that two and two are four and that lying is dishonorable; the men of the next generation may feel equally sure that two and two are five and that lying is most honorable. Thus Protagoras the Sophist asserts that one and the same thing can be true to "one mind and false to another, and even to the same mind true at one time and false at another; for both truth and falsehood are relative and subjective."¹ In modern times the rational-

¹ Stoeckl, "History of Philosophy," trans. by T. A. Finlay, p. 59.

istic philosopher Ferrari says: "No absolute truth exists in the human mind."¹ Thus also Professor James conceives truth to exist in a fusible, malleable condition; and he tells us that "we have to live to-day by what truth we can get to-day, and to be ready to-morrow to call it falsehood."²

John Mill quotes³ the anonymous author of "Essays by a Barrister" in apparent confirmation of views so preposterous. This skeptical barrister asks us to "imagine a man who had never had any experience of straight lines through the medium of any sense whatever, suddenly placed upon a railway stretching out on a perfectly straight line to an indefinite distance in each direction. He would see the rails which would be the first straight lines he had ever seen, apparently meeting, or at least tending to meet at each horizon; and he would infer, in the absence of all other experience, that they actually did enclose a space when produced far enough. Experience alone could undeceive him."

"Risum teneatis, amici!" This is surely a childish way of proceeding. Men of this sort assumed to be rational would argue thus: "The rails seem to meet; therefore they actually do

¹ Ueberweg, "History of Philosophy," trans. by Geo. S. Morris, A. M. v. II, p. 514.

² Professor James, *Pragmatism*, p. 223.

³ Examination of Sir W. Hamilton's Philosophy, v. 1, c. 6, p. 90.

meet; things at a distance appear to my sight different from what they are near by; therefore they are actually different." A race of such people would not be rational beings at all, they would be an anomaly which could not exist anywhere except in a diseased fancy.

We now come to the second instance in which the same intellectual juggler wishes to show how two and two might make five to people living under conditions different from our own. He says: "Consider this case. There is a world in which whenever two pairs of things are either placed in proximity or are contemplated together, a fifth thing is immediately created and brought within the contemplation of the mind putting two and two together. . . . In such a world surely two and two would make five."—Now what shall we say to this? In the first place, the man who puts forth this absurdity supposes that in point of fact two and two are four, since he tells us that a *fifth* unit is created and brought within the contemplation of the mind engaged in putting two and two together. Hence the persons forming the judgment, "two and two are five," would be simply deceived. But is it possible for a thinking faculty to be thus necessarily deluded? No, it is not; for it would then be a knowing faculty incapable of knowing, and this involves an evident contradiction.

76. Evolution of Knowledge. However, there is a correct sense in which we may say that knowledge or logical truth (see n. 47) is perfectible and consequently capable of evolution. As appears from the preceding theses, this may happen in two ways. First, our knowledge of truth can be ever broadening as regards the object of the mind's activity. For the objects of knowledge pass all bounds. Just as a comet traveling through the vast expanse of the universe, no matter how far it has gone, still finds endless depths of space before it, so likewise man's mind, when it has sounded one depth encounters still others and others, lying beyond, without ever reaching a last. And this will seem the less strange when we remember that amongst the objects of thought is God, the absolute, the incomprehensible, the infinite. Knowledge is, in the second place, susceptible of constant evolution, as regards the perfectibility of the human mind itself. The individual man, as long as he retains his intellectual powers unimpaired, can continue to give his mind a keener edge and make it fitter for the discovery of truth. As, moreover, every generation adds something of its own to the intellectual store left by those that went before, we can readily see how mental evolution can go on indefinitely, provided, of course, men live up to the laws which the God of

nature has established for the moral growth of his children. Once these laws are generally set aside, retrogression is sure to ensue.

77. Infinite Knowledge Incapable of Evolution. There is one being, however, whose knowledge is incapable of evolution. It is that Being who sees everything, the present, past and future, the real and the possible at one glance and in the radiant splendor of a mind which is Truth Itself, the Infinite God.

CHAPTER FOURTH

DEFINITION OF ERROR OR LOGICAL FALSITY

Summary: Introduction — Falsity — Division of falsity — Difference in meaning of terms falsehood, falseness, and falsity — Negative and positive disagreement of thought with thing — Error the contrary of truth.

78. Introduction. Hitherto we have spoken of logical truth. When we gave its definition at the beginning of our treatise, we briefly referred to its opposite, namely logical falsity or error (n. 6). We shall now develop the concept of error more fully. This will complete our treatise by showing the opposite of truth and will make clear a concept itself of great importance and fundamental in philosophy. But as error is a species of falsity, we must first say something about falsity in general and its divisions.

79. Falsity. Falsity in general is the opposite of truth in general. Truth is conformity between thought and thing, and falsity non-conformity between thought and thing. Since, however, non-conformity usually designates "refusal or failure to conform, especially to some ecclesi-

astical law or requirement," it will be preferable to avoid the term non-conformity and use instead the term "disagreement or discrepancy."

80. Division of Falsity. Like truth, falsity is threefold, ontological, logical, and moral. Ontological truth, it will be remembered, was defined as conformity of thing with thought, logical truth, as conformity of thought with thing, and moral truth, as conformity of speech with the speaker's internal judgment. Accordingly, ontological falsity will be disagreement of thing with thought, logical falsity, disagreement of thought with thing, and moral falsity (or a lie) disagreement of speech with the speaker's internal judgment. At present, we are concerned only with logical falsity, which is ordinarily called error.

81. Difference in Meaning of Terms, Falsehood, Falseness and Falsity. But before we enter upon its analysis, it might be well to call attention to the meaning of the three derivatives of the adjective "false," namely, falsehood, falseness, and falsity. As there is question here of the signification of words, we shall let the Century Dictionary speak for us. "The modern tendency," the Dictionary says, "has been decidedly in favor of separating them (sc. falsehood, falseness, and falsity), *falsehood* standing for the concrete thing, an intentional lie; *falseness*, for the quality of being guiltily false or

treacherous; as, he is justly despised for his falseness to his oath; and *falsity*, for the quality of being false without blame; as, the falsity of reasoning." Hence the most appropriate term to designate the disagreement between thought and thing is falsity. It must be acknowledged, however, that the words falsehood and falseness are also sometimes used in the same meaning.

82. **Negative and Positive Disagreement of Thought with Thing.** But to return to logical falsity or the disagreement of thought with thing. To avoid misunderstanding note that this disagreement of thought with thing may be taken in two ways, *negatively* and *positively*. Regarded negatively it consists in the intellect not representing an object exhaustively or fully. Thus viewed it is merely a partial negation or absence of truth, or, partial ignorance. This sort of discrepancy between thought and thing is common to all finite minds, since finite knowledge is necessarily confined within bounds. God alone is unlimited Truth, Truth without admixture of ignorance. Bear in mind, however, that in the English language, such mere *want* of conformity between thought and thing is never styled "falsity." Thus we would not term the mathematical knowledge of a tyro in arithmetic "false" any more than we would call a *bust* of Washington a "false" representation of the first president of the United States. The knowledge of a be-

ginner in a science is *partial* knowledge, and a bust is a *partial* representation of the human figure.

It is not, however, negative disagreement of thought and thing that concerns us here; we have to do with positive disagreement in which the mind expresses an object other than it is, or, in other words, in which the mind ascribes to an object what does not belong to it, or denies of an object what does belong to it. The reason then why this kind of disagreement between thought and object is qualified as positive is, because that which renders the intellect unconformable to its object is something *positive*, viz., a distorted expression or a *misrepresentation* of an object, and not a mere *non-representation* of something. To illustrate by an example—were our tyro in arithmetic to state that one times one equals two, his knowledge of the science of numbers, besides being limited, would likewise be false, at least, as far as this assertion goes.

The difference between negative and positive disagreement is well elucidated by the two kinds of images formed in plane and convex mirrors. A good plane mirror gives a correct image of your face, although it may not reflect the rest of your body, but a convex mirror distorts or caricatures whatever part of your body it reflects.

83. Error the Contrary of Truth. We can

easily see now why (logical) truth and error are said to be *contraries*. For, according to Aristotle, contraries are "those things which in the same genus differ most." But both logical truth and error are contained under the same genus, viz., intellectual act, and moreover error differs more from logical truth than any other intellectual act, e. g., opinion or suspicion.

CHAPTER FIFTH

ERROR IN RELATION TO IDEAS AND JUDGMENTS

ARTICLE I

IDEAS NOT SUBJECT TO ERROR

Summary: Question stated — Thesis — Proof — Answer to a query.

84. Question Stated. After having explained what logical falsity or error is, our next inquiry is, in what act or acts of the mind it is found. It is not necessary to show that our intellects are subject to error; sad, every-day experience attests this only too plainly. But it is not so easy to settle where falsity is found, whether in the idea or in the judgment or in both. The following two theses shall serve as a reply to these questions.

THESIS I I

An idea taken strictly as such cannot be false.

Note that in the thesis we speak of ideas strictly so called, i. e., of ideas regarded purely as men-

tal representations or expressions of objects. For, as we shall explain more fully further on (n. 91), ideas are sometimes taken in a wider sense for representations involving a relation to judgments.

85. Proof of Thesis. The thesis is proved thus: Every idea is, of its very nature, an image, as appears from the definition of an idea properly so called. Now an image which is not conformed to some object, is no image at all; to style it an image, involves a contradiction. Hence every idea is necessarily conformed to some object and consequently necessarily true. An idea to be true need not, however, resemble this or that definite object; it is sufficient for it to be in accord with the object which it actually represents, no matter whether that object is existent or merely possible. Thus the idea of a mountain of gold is a true idea; for it is conformable to some reality, which, if not actually existing is, at least, possible.

86. A Query. But some one may say perhaps, how do you know that the definition of an idea as given by us is correct and not arbitrarily formed? Are there not many philosophers who deny that ideas are representations of *things* and who look upon them as *mere subjective* modifications of the thinking agent?

There are philosophers, we admit, who regard ideas in this light, but through a very excess of

unreasonableness. For if ideas are mere subjective forms of the mind and do not express things, all knowledge of things is thereby rendered impossible; hence skepticism, and that, too, of the most sweeping universality would be our inevitable lot.—The radical reason why ideas represent things, is bound up with the very constitution of our minds. For, as is evident to everybody, the mind is a knowing faculty. Now it would not be a knowing faculty, if ideas did not represent *things*, since knowledge consists in the mind rendering *things* present to itself by means of ideas.

ARTICLE 2

JUDGMENTS SUBJECT TO ERROR

Summary: Relation of judgment to error — Thesis — Proof — Solution of a difficulty — Answer to a query — In what sense ideas may be called false — Discussion of two difficulties against the necessary truth of ideas — Scholium.

87. Relation of Judgment to Error. Since ideas then cannot be false, where is falsity found? Our next thesis will answer this query.

THESIS 12

Judgments can be false.

88. Proof. This thesis follows as a corollary from the preceding one (n. 84). For it is

certain that some one of our mental operations is subject to error; how could we otherwise account for the many mistakes we make? Now this operation of the mind is not the simple apprehension, as just shown. Therefore it must be the judgment either immediate or mediate.

This argument by exclusion proves the fact that the judgment is liable to error. It will be useful to add two short proofs which take cognizance of the manner in which the intellect makes mistakes. The first is as follows:

Experience tells us that when we err we regard as identical things which are not identical, or consider as non-identical things which are identical. Now it is in the judgment that we hold objects to be identical or otherwise. Hence we infer that judgments can be erroneous.

The second argument, a variation of the preceding, is based on the nature of error.

To err is to affirm of an object what does not belong to it, or to deny of an object what does belong to it. The correctness of this follows from the very idea of error as expressed in its definition. Now since affirmation and negation are peculiar to the judgment, we are again led to the conclusion that error can be found in the judgment.

The last two arguments likewise serve as a confirmation of the previous thesis that ideas cannot be false.

89. Solution of a Difficulty. But here a difficulty suggests itself. How is it possible for the intellect to err at all? Has it not truth for its end and does it not consequently seek truth of its very nature? How then can it err, since to do so would be opposed to its natural tendency?

We reply, it is unquestionable that truth is the goal of the mind. From this, however, it merely follows that when the intellect accepts anything that is false, it does so because of the apparent truth in it. Just as evil must present itself under the guise of good before the will can choose it, so error has to put on the garb of truth before the intellect can assent to it. The ancients could never have believed that the earth was flat unless it had seemed true to them. No one nowadays could adhere to such a persuasion; for it no longer has even the semblance of truth.

90. Answer to a Query. The explanation just given likewise supplies the answer to a question often asked in this connection. Does the mind perceive its own lack of conformity to a thing in a false judgment as it perceives its own conformity to an object in a true judgment?

We say, it does not, at least not clearly; for if it clearly apprehended its own deviation from truth, it would thereby become aware of its own mistake and thus cease to be mistaken. What

the mind does cognize in a false statement, is its *apparent* or *seeming* agreement with reality.

91. In What Sense Ideas May Be Called False. We have now finished the discussion of the theses that ideas cannot, and judgments can be false. But before we proceed further, we must dispose of an objection to our teaching. We often hear people speak of false or erroneous *ideas*. How can such modes of speech be reconciled with the doctrine just set forth?

This exception taken to our position can, however, be easily shown to be groundless. For although ideas are often designated as false, yet they are never so designated when they are regarded strictly as ideas, but only when they are considered *relatively* to judgments, or when "idea" is identical in signification with "judgment."

Now ideas viewed *relatively* to judgments are termed false in two ways; first, because they can occasion false judgments. It is plain that in this case the adjective "false" is employed not properly but analogously. For it signifies, not what the definition of falsity implies, but "capable of occasioning a false judgment." Thus if I conceive "gold" merely as a bright, yellow metal or represent "diamond" to myself as a transparent substance sparkling in the sun, I may be said to have a false idea of "gold" and of

“diamond,” since these two ideas may easily lead me to judge that a showy brass watch-chain is made of gold or that a piece of cut glass worn in a necklace is a diamond.

In the second place, ideas viewed *relatively* to judgments are called false because they are the result of false judgments and can again be resolved into false judgments. For illustration take the three expressions, “spontaneous generation,” “missing link,” and “thinking matter.” Each of these three phrases (or compound ideas) implies a previous false judgment. For the first supposes erroneously that living beings can be generated from non-living matter; the second is based on the mistaken opinion that the human race had some simian form for its immediate ancestral stock; and the third rests on the false assumption that matter is capable of thinking.

Ideas are likewise called false, because by an abuse of language idea sometimes signifies the same as judgment. Thus we speak of false ideas of liberty, social order, property, government, because of the false judgments formed of these subjects. Here is what Webster has to say on this point: “There is scarcely any word which is subjected to such abusive treatment, as the word idea, in the general way in which it is employed, as it is used variously to signify almost any act, state, or content of thought.”

When ideas are false in either of the two ways

just explained, they are termed false "per accidens" by the scholastics.

92. Discussion of Two Difficulties against the Necessary Truth of Ideas. We shall now add two difficulties against the necessary truth of ideas. We deferred their discussion to this place, because the solution of these difficulties cannot be satisfactorily understood without some reference to the last thesis on error.

93. First Difficulty. Let us begin by directing attention to an apparent inconsistency between the last two theses. If ideas are necessarily true, it might be asked, how can there be false judgments? For what is a judgment but the union or separation of two ideas by means of affirmation or negation?

To understand the answer to this objection, note first, that when a judgment is said to be the union (or separation) of two ideas, there is question, not of *subjective*, but of *objective* ideas, i. e., of the objects expressed by the subjective ideas. Now it may easily happen that, though the subjective ideas rightly represent their respective objects, the mind may nevertheless combine two objects which are not identical. For the subjective ideas, notwithstanding their being true, may be only partial, and hence confused, vague, or indistinct expressions of their objects. In such a case, it is quite possible for the intellect to perceive an apparent identity where in reality there

is no identity. This shows that we can have false judgments without false ideas properly so called. It must, however, be held that false judgments invariably presuppose confused ideas, in other words, false ideas in an improper sense of the term. For ideas which are in every way clear and distinct conceptions of their objects cannot result in erroneous judgments, because, as we shall explain at length further on (n. 96), the intellect can never be mistaken except when unduly influenced by the will, and it cannot be thus influenced when the identity between the subject and the predicate is altogether evident as it would be, if the ideas involved in a judgment expressed their objects with perfect definition and distinctness. Take an example: Suppose I say, "Francis wishes me well," because he always seems pleased when I meet him — this judgment may be false by reason of the indistinct conception I have of Francis, the subject of the proposition. But if Francis, besides always showing me a beaming countenance, likewise confers benefits upon me and puts himself to trouble for my sake without any prospect of an adequate return, then my idea of Francis possesses such clearness as to preclude the possibility of a mistake in my judgment, "Francis wishes me well."

The foregoing difficulty, then, merely shows that our ideas of things are often confused, but

not that they are ever false in the full rigor of the word.

94. Second Difficulty. The existence of genuinely false ideas, however, seems to follow from other considerations. In fact, the very nature of an idea apparently implies it; for are ideas not images of things? Now everybody knows that images may be unlike the objects which they represent. Hence it looks very much as if the argument which we brought forward for the necessary truth of ideas, derived as it is from the nature of an image, proves the very opposite.

This objection rests on a misapprehension. It is undoubtedly correct that images are often unlike the *definite, determined* objects to which they are attributed: but they are never different from the objects which they actually represent or — to use a scholastic term — they are never at variance with their “formal objects.” These they always express to the smallest particulars. Thus when watching a wheel moving very rapidly, I may perhaps form the idea of a “wheel at rest.” This idea, as an idea, is true, since it is, in reality, conformable to a wheel at rest. The fact that it does not represent the thing before me as it is in itself, matters not; because an idea as such has no immediate relation to anything except what it actually presents to the intellect;

it is only through the judgment that an idea is referred to this or that definite thing, in our case, to the swiftly turning wheel as it exists in external nature.

But, some one perhaps objects, your answer is not satisfactory. For it supposes that there is always at least a possible object corresponding to an idea. Such, however, does not seem to be the case. Thus no objects of any sort answer to the ideas of "square circle," "finite God," "a thinking bush," and similar absurdities. Hence these ideas are strictly false because ideas are strictly false when they represent no objects.

We answer in general that there can be no *one* idea of an absurdity as such. For absurdities are made up of incompatible ideas, and it is impossible to combine two incompatible ideas into one idea for the very reason that they are incompatible.

But, perhaps, you take exception to our reply. For if we have no idea, say, of a square circle, how can we speak of it and make it the subject of a proposition?

We can meet this evasion of our solution in two ways. Our first response is:- When we pronounce the judgment, e. g., "A square circle is an impossibility," we really conceive *two* separate ideas, viz., square *and* circle; and of these two ideas regarded relatively, we affirm that they are incompatible or mutually destruc-

tive. Hence the above judgment might also be expressed thus: "The idea of square cannot possibly be combined into one with the idea of circle," or, "The identification of square and circle is an impossibility." In this view of the case then, since irreconcilable ideas do not coalesce into *one* idea, we cannot be said to have an idea of an absurdity.

Sometimes, however — and this is the second way of encountering the attempt to explain away the answer to the last difficulty — the intellect does combine two contradictory ideas into *one* idea; but whenever this happens, it drops the note or notes which render them incompatible; consequently, at least one of the ideas involved in such absurd combinations is an inadequate or vague representation of its object. It is in this way that some people have succeeded in forming the idea of "bee endowed with intelligence." They apprehended "bee," let us say, as "an animal capable of producing *regular* structures," omitting the attributes which make "bee" and "intelligent" incompatible. Thus it became possible for them to form the judgment, "bees are endowed with intelligence" and then to unite the subject and predicate of the judgment into the compound idea, "bees endowed with intelligence." Had they conceived "bee" rightly as "an animal capable indeed of building *regular* structures, but essentially incapable of knowing

how or why it fashions those structures," they would not have fallen into the mistake.

It will be remembered that ideas such as "bee endowed with intelligence," are called by the scholastics false "per accidens," that is, false as the result of a false judgment. (See n. 91.)

95. A Scholium. Having thus settled in what intellectual act error is found, we shall next say something about another question closely connected with the previous discussion and analogous to a question minutely sifted in the part of the treatise relating to "truth," namely the question of degrees in error. Can one judgment be falser or more erroneous than another? We stated before that truth as such, consisting as it does in a relation of equality between thought and thing, does not admit of degrees. Just the opposite holds true of error, because it is constituted by a relation of inequality between thought and thing, and inequality is, of its very nature, variable.

The same may also be shown in another way. Falsity is regarded as a *positive* departure from truth for the reason that it is not merely a non-representation, but a distorted expression of something. Now, as positive departure from truth may be more or less considerable, it follows that one statement may be more or less erroneous than another. Thus the judgment, "The world is not created nor distinct from the Deity," is

further removed from the truth and hence false than this other, "The world is not created indeed, but is distinct from the Deity."

Note, however, that if we prescind from the positive element in falsity and view it merely as a lack of mental conformity to the object of thought or as contrariety to truth, then it evidently does not admit of variations.

All other inquiries regarding this phase of our subject are to be decided on lines similar to those followed in our investigations of the degrees of truth. But as a lengthier discussion of this point is of lesser importance, we shall rest satisfied with having drawn attention to this problem and pointed out in general in what manner it can be solved.

CHAPTER SIXTH

THE WILL IN RELATION TO ERROR

Summary: Error due to will—Thesis—Preliminary remarks—Elucidation of thesis—Scholium—How the will induces the intellect into error—Influence on the will when the intellect errs—Answer to an objection.

96. **Error Due to Will.** Knowing now that the judgment only can err, we shall examine next from what source error comes or how it is possible for error to insinuate itself into the mind. This will be the burden of our next two theses.

THESIS 13

The intellect cannot err of itself, i.e., when left to its own resources; but it is capable of erring under the impulse of the will, in matters not evident.

The thesis may also be stated in other words thus: The human mind is essentially infallible in the sense that error cannot accrue to it from within, but it is essentially fallible in the sense

that error can, under certain conditions, enter into it from without. This is what the scholastics understand by saying that the human intellect is infallible "per se," but fallible "per accidens."

97. **Preliminary Remarks.** Lest, however, our meaning be mistaken we wish to notice first that the statement just made is incapable of demonstration, because that statement can plainly not be demonstrated, the truth of which must be taken for granted before I am capable of demonstrating anything. Now the assertion that the mind does not err of itself is of this sort. For unless I assume the truth of this assertion, how can I know that I will not err in my demonstration?

But it does not follow from this that the inerrancy of the mind when not interfered with from without, is assumed blindly; for it is self-evident and hence dispenses with all proof. This inerrancy no more stands in need of proof to be known with certainty than the sun requires the light of a candle to be seen with distinctness. The considerations we are about to offer are merely intended to make the evidence of the truth in question shine out more clearly and scatter whatever haze might prevent its free play upon the mind.

98. **Elucidation of First Part of Thesis.** The first part of the thesis (viz., that the mind

cannot err when left to itself) can be elucidated thus:

If the mind could err of itself, it would then be capable, by its very nature, without any outside interference, of expressing things within itself other than they are. Now a faculty which can do this, is not a knowing faculty since to know is to express things as they are. Hence the supposition that the mind can err of itself, deprives it of its character as a knowing faculty. Nor does it avail to say that the intellect may remain a knowing faculty even though it can go astray of itself in some matters, provided it cannot do so in all. For if the cognitive faculty when left entirely to its own resources can fall short sometimes, how can I tell that any particular judgment is not one of the deplorable cases in which the mind is intrinsically fallible? Would not every judgment proceed from the same tainted source? The assumption, then, that the intellect when unhampered from without can swerve from the truth, destroys all certainty and lands us in universal skepticism. It has consequently the mark of absurdity plainly stamped upon it.

Nor have any of those pretending to deny the infallibility of the intellect in the sense explained ever been truly convinced of their denial since they cannot so much as deny this infallibility without in the same breath implicitly affirming

it and thus plainly contradicting themselves. For how can they know that their denial is true — as they tell us they know — unless they suppose their minds to be essentially infallible when making this denial?

99. Elucidation of Second Part of Thesis.

We now come to the second part of the thesis in which we assert that the intellect can err, under the impulse of the will, in matters not evident. Note we say, in matters *not* evident. This implies that in matters which are *evident* the intellect cannot wander from the truth. For if it could, it would then be incapable of arriving at truth, even when the object is presented to it under the most favorable circumstances, namely when illumined by evidence; and to suppose this, is to suppose what is against the very nature of the mind as a cognitive faculty. Again (objective) evidence is the last criterion of truth; now this must be altogether incompatible with error. For otherwise we must despair of ever arriving at certainty.

The intellect then can never be deceived in matters presented to it as evident; hence since, in point of fact, it does often err, this can be only when evidence is lacking. Nor need we be surprised at the mind's liability to go astray under such circumstances. For it is a *finite* and hence a *limited* faculty; now a limited faculty may fall short of perfection if all the conditions

for the due exercise of its activity do not obtain; consequently, since evidence is one of the conditions for the right use of the understanding, we need not wonder at error creeping into the mind when the truth is not evident. In a similar manner, the sense of sight is exposed to many illusions if the requisites for proper vision are not at hand.

We have thus shown that though the intellect cannot be deluded in matters which are evident, it may be deluded where evidence is not forthcoming. It still remains to prove that error makes its way into the intellect through the will. Here are a few reflections to assist us in making this matter clear.

Since the mind, unlike the will, is not free, it cannot, of course, determine itself to mental assent or dissent, but must be determined. Now this determination cannot proceed from any other source than either from the object of thought or from the will, since there is nothing else not reducible to these two that can influence the intellect. But it cannot arise from the object of thought. For this is offered to the mind either with or without evidence. If the former is the case, the judgment in regard to that object is necessarily true since, as we pointed out above, evidence cannot stand with error. But if the latter happens, namely if the object placed before the intellect is devoid of evidence, no

judgment can follow at all, because when sufficient evidence is not available the mind does not truly see what is presented to view, and consequently, being as it is a knowing or "seeing" faculty, cannot be moved to yield assent. It follows then that the *object* cannot cause the intellect to commit itself to a false judgment; error must therefore be traceable to the *will*.

100. **Scholium.** It is plain that the will can never "elicit" i. e., form a judgment, since the judgment is an intellectual act and the will can put forth only volitional acts. What the will can do, is to *urges* the mind to make a given judgment. There is nothing in this that exceeds the power of the will as can be readily seen from parallel instances. Thus, the will cannot, indeed, nod or speak, but it can in some subtle way so exert its dominion over the muscles of the neck and the organs of the voice as to make the head bend forward and the tongue give utterance to words.

101. **How the Will Induces the Intellect into Error.** However, in order that the will may induce the mind to embrace error it is necessary, on the one hand, that the false should have the appearance of truth—since the intellect can never accept as true a statement which it evidently recognizes to be false—and on the other, that there should be inducements for the will to prefer error to truth. It will be conven-

ient to set down first some of the mental conditions which tend to clothe the false in the garb of truth and make it possible for the will to exert an undue influence on the mind.

The chief offenders in this matter are *confused* ideas, that is, partial representations which do not express enough attributes of things to enable us to discern one thing from another. For thus we come to ascribe to one object what we observe in another with which it agrees in some particulars but from which it differs in others. What holds true of confused ideas applies, of course, to confused judgments and reasonings as well. As we gave several examples illustrative of this point in explaining the difficulties against the previous thesis (n. n. 91, 93), there is no need of adding any others.

Anything then that promotes confusion of thought, likewise predisposes the mind to error; and many, indeed, are the factors calculated to obscure our ideas. To mention a few of them:

In every language there are words of ambiguous meaning. The same expression often signifies several things alike in some respects, but unlike in others. Hence the mind is prone wrongly to substitute one thing for another. Thus a father may think that he has complied with his duty of educating his sons if he sends them to an institution where their intellectual powers only are developed, because "training

of the head” is one of the meanings which some people give the much abused word “education.”

Vagueness of ideas is further fostered by the weakness and treachery of our *memories*. You forget an occurrence in part and, in consequence, are liable to take it for another. Perhaps you deem some past action of yours blameworthy because a circumstance rendering it lawful has escaped your mind.

The *imagination* is likewise frequently chargeable with our confusion of thought. Restless and illusive as it often is, whilst I am thinking of one thing it slips another into its place bearing some resemblance to the former. In this manner the intellect, by reason of its (extrinsic) dependence on the fancy, is apt to jumble ideas together and then wander from the truth. Is it not thus that the builders of castles in the air are deluded and that many a one idles away his time in a fool’s paradise, only to be driven from it rudely by the stern realities of life?

“Hence the fool’s paradise, the statesman’s scheme,
The air-built castle and the golden dream.”¹

Confusion of thought then is the fundamental disposition on the part of the intellect for the formation of mistaken judgments. But judgments thus formed are very apt to become the ground-work of further errors. In this way,

¹ Pope, *Dunciad*, III, 9.

it has come to pass that ingenious speculators have erected entire philosophical systems, defective "from turret to foundation stone," because they built upon wrong principles. These philosophers have been likened to men with diseased eye-sight. For as diseased eye-sight distorts everything presented to it, so a mind imbued with erroneous principles twists and perverts every truth seen in the light of these principles.

There is especially one class of errors which, when they have once taken hold of the mind, it is well-nigh impossible to uproot, namely *prejudices*. By these are usually meant deep-seated, erroneous opinions which are used as starting points for judging about other matters. These prejudices are manifold, racial, national, sectional, political, religious, etc. Of these the most deeply rooted are those which have been implanted in our youth.

Another predisposing cause to error on the part of the intellect and a great ally to confused ideas is a want of proper *attention* and *reflection* manifesting itself in absent-mindedness and mental distractions. Many confused ideas would disappear were the mind but careful to attend to them and examine into them closely. But it only too often performs this task in a very deficient and perfunctory manner. The reasons for such lack of mental diligence and effort are

various. Often it is due to the attractions of sense completely engrossing the whole man, or to preoccupations with other matters than the one under consideration. Frequently absent-mindedness and distractions are traceable to moral causes: some one is worried, excited, embarrassed, or under the influence of some other strong emotion. In consequence his mind wanders; he cannot concentrate his thoughts on the question he is engaged upon. Sometimes, too, the intellect cannot reflect on its ideas sufficiently by reason of the *nature* of the *subject* to be investigated. Perhaps the subject is very complicated; it branches out into numerous parts and subdivisions; lengthy and difficult reasonings are required to arrive at a final conclusion. The attention is scattered among a multiplicity of details and hence cannot be centered on any one point in particular; thus the intellect becomes bewildered, and who does not know how conducive such a state of mind is to confusion of thought?

102. **Influence on the Will when the Intellect Errs.** These are a few of the mental conditions which give an appearance of truth to what is really false. We shall next search out some of the inducements urging the will to prefer error to truth. These inducements are of two kinds, the one making the will desirous to have a certain judgment true, and the other

making it overeager to have the intellect arrive at a conclusion speedily.

As regards the first class of these inducements there may be as many as there are human interests. Thus, for example, our wills are often led to desire that something should be true, because it is useful to us, or because it flatters our passions, as our pride, our greed, our love of power, or because it promotes the welfare of others, as of our country, friends, benefactors, etc., etc. In such cases, our wills frequently strive to make what is really evil and wrong appear good and right by urging on our intellects to turn to reasons in favor of what we want, and away from reasons against it. By skilful maneuvering of this kind, the volitional faculty at times succeeds in giving to the false a semblance of truth and finally wresting assent to error from the deluded intellect. Thus an avaricious man is very likely to chance upon reasons why his ill-gotten gains have been acquired justly and need not be restored to the rightful owner; for he wants it to be so. A conceited person will give ready credence to the most fulsome flatteries, because he wishes these commendations to be true.

And now a word about the second kind of inducements which dispose the will to lead the intellect into hasty conclusions.

One of the most ordinary of these induce-

ments is the necessity we are sometimes under of acting on the spur of the moment or of giving advice without being allowed time to deliberate. Many a luckless student has failed to satisfy his examiners, because he lacked leisure to consider. Frequently those incentives to the will for misleading the mind are traceable to a person's overconfidence in his powers and to a consequent disdain to reflect. Often they originate in a dread of being regarded mentally sluggish, or in an unwillingness to exert one's brain. This latter is one of the reasons why so many prefer to take their opinions ready-made from others in whose wake they blindly follow.

We have thus established that error is always, in last resort, due to the pressure of the will brought to bear upon the intellect.

103. Answer to an Objection. But, some one here interposes, are there not mistakes with which the will has nothing at all to do? When a clerk blunders in adding up a column of figures, or a copyist misspells a syllable with the spelling of which he is perfectly familiar, or a reader mispronounces a well-known word — surely the will of any one thus erring cannot be held responsible for the mistake; in fact, these persons, it would appear, willed the very contrary of what they did.

To solve this difficulty observe that these mistakes are not mistakes of the mind so much as

tricks of the fancy and slips of the pen and tongue. The fancy, the hand, and the tongue are not always completely under our control. The errors just referred to should rather be called "mechanical" errors, "mechanical" here meaning "made or done as if by a machine." But even regarded in this way, they are often due to a want of sufficient attention and effort, as is plainly evidenced by the severe reproofs at times administered to those failing to give satisfaction in the performance of their work. However, it is not with this sort of errors that we are concerned here, but with purely intellectual errors. These, we hold, always have their origin in the will. Hence should the accountant assert positively and unconditionally that his calculations are correct, and the copyist, that no spelling mistake has slipped into his pages, and the speaker, that every word of his speech was pronounced according to approved fashion, they must, if mistaken, be charged with hastiness in their judgments and going beyond what the evidence at their disposal warrants. But, as a rule, men are not thus absolute in their statements. Most men know their limitations and the great difficulty there is of always reaching the highest degree of excellence. Hence they will pronounce upon the faultlessness of their work only conditionally or with some qual-

ification; in which case they do not err. Thus the accountant, if he be wise, will say: "My calculations are correct to the best of my knowledge," and this is true.

CHAPTER SEVENTH

ERROR, IN WHAT RESPECT NECESSARY

Summary: Question stated — Thesis — Physical and moral necessity of error — Formal and material error — Proofs of thesis — Two scholia — Summing up — Conclusion.

104. Question Stated. We now come to another point closely connected with what precedes. It regards the question to what extent error is necessary. The following thesis shall embody what is to be held on this matter.

THESIS 14

Error, though it is never physically necessary (inevitable), may be so morally.

105. Physical and Moral Necessity of Error. Before we enter upon the proof of this statement, a few preliminary remarks are needed to clear the way. And first we must explain what is meant by physical and moral necessity of error, as the right understanding of the thesis hinges on a correct conception of these two notions.

We are *physically* necessitated to error if our intellects do not possess the natural or physical power to keep clear of error. Suppose we could no more avoid error than we can stave off death, error would be a physical necessity to us. We are *morally* necessitated to error if the obstacles in the way of full truth are so great that we cannot surmount them save by efforts almost passing human strength. The qualifying word "moral" is employed because the natural inclinations, tendencies, and habits of man, which form the main obstacles to the avoidance of error are called "mores" (manners, habits) in Latin. By way of illustration take a man who is intensely national. Ordinarily it is a hopeless task to convince such a one of certain failings of his nation. It is *morally* impossible for him to rid himself of his mistaken notions.

106. **Formal and Material Error.** There is still another important division of error to be noted here, although not so generally known as the one just given, namely the division of error into "formal" and "material" error.

Formal error is the firm adherence of the mind to what is false. This is *true, genuine* error, or error properly so called. *Material* error is *probable* assent to a false statement for satisfactory reasons, or, if you will, it is a well-founded, prudent opinion, which, however, chances to be false. Hence it differs greatly

from formal or true error, since in it we do not adhere to a false assertion as certain, but only as probable and well-founded. Error of this kind regards the matter of a statement rather than the assent itself, and it is on this account that it is named material (objective) error. It is qualified or conditioned error, whilst formal error is unqualified or unconditioned error.

107. **Proof of First Part of Thesis.** Our argument for the *first* part of the thesis, viz., that error is never *physically* necessary, runs thus:

If error were ever physically necessary to the mind, this necessity would proceed either from the nature of the intellectual faculty or from the object known or from the will. For, these are the only three causes which, in the order of nature, can influence cognition. Now intellectual compulsion to error, if such there be, can plainly not have its origin in the nature of the *knowing* faculty, since (as shown before n. 96) the mind of itself never strays from the truth. Nor can the *object* necessitate the intellect to yield assent. For the object cannot constrain a faculty to act in response unless it be duly applied to that faculty. Thus an object, though colored, is incapable of making itself seen by the eye unless it is impressed on the organ of sight by the action of light. Now an object is applied to the intellect through evidence because it is through this light and through this light alone

that a thing can truly manifest itself to the cognitive faculty. But evidence is not compatible with error. Hence, an object when presenting itself as evident, although it does wrest assent from the mind, never wrests any other assent from it than assent to truth.

There is finally the will. Is it ever coërced to offer violence to the mind by so befogging and pressing upon it as to drive it into error? No, it never is. For the will is necessitated to action only by good without any admixture of evil. Now error is far from being such a good; it is only an apparent good, a good marred by evil. Whence it follows that error is never a physical necessity to us. If we err, we err of our own free choice.

108. Proof of Second Part of Thesis. But, as stated in the second part of our thesis, error is sometimes morally necessary, in other words, the hindrances to be overcome in keeping aloof from error are often so many and so great that most men are sure not to surmount them.

And first, there is nothing incongruous in the *possibility* of a moral necessity for error. For as long as error, though avoidable only with the greatest difficulty, is not foisted upon the mind with absolute necessity, it is due to the free action of the will, and that such can be the case we have maintained all along.

The *fact* that error is often morally inevitable

is brought home to us by every-day experience. Have we not all clung to a false opinion with such tenacity that, had not circumstances changed and light poured in from unexpected quarters we should never have been undeceived? And have we not at times, when our strong belief in some pet theory was assailed as untenable, said: "No one shall ever convince me that I am wrong?" When afterwards brought face to face with incontestable proofs upsetting our persuasion, we perhaps exclaimed: "Who could ever have thought it? I could never have believed it"; all which goes to show that until the obstacles in the way of seeing the truth had been removed, it was practically impossible for us to rid ourselves of our erroneous opinions.

What we have noticed in our own mental life, we find corroborated by observing the conduct of others. We behold men so wedded to false religious beliefs or so attached to doubtful political principles that a change of view in their case would seem nothing short of a miracle. We say of such persons, "They are in good faith, but mistaken," and we often deem it a matter of prudence not to meddle with them, but to let them alone; for arguing with them, only renders them more obstinate. How often has it not happened in times past that nations have gone to war and sacrificed thousands of lives in defense of false principles and unfounded claims which they, in

all honesty, deemed as beyond all dispute? Those errors of the ancients regarding the motion of the sun, the flatness of the earth, and the non-existence of antipodes were, undoubtedly, in most cases morally insuperable.

To account for this fixedness in error on the part of the mind, we need only recall the many causes of false judgments enumerated before. The intellect finds itself at times hedged about by so many fallacious arguments and the will so strongly allured by some apparent good or so fiercely repelled by some dreaded evil that it would require an almost superhuman effort for truth to come into its own. We say an *almost* superhuman effort. For occasionally, though very rarely, some one succeeds in rolling back the thick cloud of error. Such exceptions to the rule go to show that there is no physical, but only a moral impossibility, to shake off error.

109. Two Scholia. To complete our doctrine on the avoidableness of error and to ward off prospective difficulties, we shall make a few observations.

We are sometimes liable to imagine that there is "formal" or real error where there is only "material" error. For what we think another holds for altogether certain, he adheres to merely as a well-founded opinion, for which, as a matter of fact, he has good reasons. In such a case the person is not really mistaken, though

the view he advocates is false, because he puts it forward merely as possessed of solid probability, and this we suppose it to possess. Take an instance. A merchant has a clerk in his employ who for a great number of years has always proved himself loyal and faithful to his firm. He confides in his long-tried assistant and would resent any attack on the latter's honesty. Still all along he is aware of the possibility of his apparently trusty servant defrauding him. However, he thinks it better to be taken advantage of than to look upon his life-long companion as a hypocrite and a thief. But behold one day the sight of the glittering gold proves too alluring for the clerk's sense of justice; he embezzles a considerable sum of money and runs away. The merchant did not, strictly speaking, err. For he knew well that what did happen might happen. He took his chances; he was the victim of his own strong sense of honor. The error in this instance was merely a "material" error. Let us add another example. You think perhaps that your eyesight is perfectly normal, that you see colors just as the majority of men do. But your assent to this conviction should be tempered by the proviso "as far as I know." For you may possibly discover upon careful investigation that you are affected with a slight degree of color-blindness, a contingency you made allowance for in giving your conditional assent.

Another point we wish to call attention to is this. When we state in our thesis that error is not physically unavoidable, this is to be understood, of course, to apply only to persons who have the proper use of their intellectual faculties. Hence we exclude from the scope of our thesis all those whose minds are in an *abnormal* condition, as the insane, idiots, those dreaming, and others similarly circumstanced. These, it is plain, cannot avoid falling into error for the reason that they have not the full and unimpeded use of their mental and volitional powers. The fixed ideas of the madman, the incoherent judgments of one who is dreaming are all beyond their control to regulate. But what holds true of them, does not hold true of the well-balanced, normal mind.

110. Summing up. To sum up — we began our treatise by analyzing and defining logical truth and some kindred notions; then, after showing ideas to be (logically) true, we asked ourselves the question, Do they possess truth in its fulness? To answer this query, we sought for a criterion which would guide us in deciding when truth has reached its fullest development. We ascertained that a sure mark of the complete possession of truth is the quiet or repose of the intellect. Next we cast about to see under what circumstances the mind is altogether at rest. We came to the conclusion that this is the

case when it knows the thing in itself to be such as it is represented and when it moreover knows that it knows aright. We were then ready to reply to the question proposed to ourselves in the beginning. In what mental operation does truth reach its highest perfection? We answered, in the judgment alone; for it alone satisfies the two conditions for the full possession of truth. A consideration of the question whether truth admits of degrees ended our search into the truth of knowledge. We then passed on to the investigation of the opposite of truth, namely error. After explaining the meaning of error we showed that judgments, but not ideas, can be false. Inquiring next whence error arises, we learned that in last resort it is always traceable to the will's undue influence upon the mind; from this we inferred that error, though never physically necessary, can be so morally.

III. Conclusion. We have thus completed the treatise on the two opposites, truth and error. The one, error, shows us man in his littleness and weakness; it sets forth his limitations and his liability to fall short of perfection.—The other, truth, exhibits him in his greatness and glory; it not only lifts him above brute creation, it leads him to the very source of all being. For by truth man knows finite things as they are and through them and in them, as in so many mirrors, God and his perfections.

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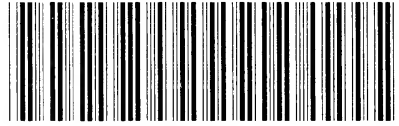
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